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THIS JOURNAL is regularly supplied by subscription to the whole of the members of SIXTEEN PHARMACEUTICAL SOCIETIES in the British Empire. The associate Journal, The Chemist and Druggist of Australasia, published at Melbourne and Sydney, is also supplied to all Australasian subscribers.

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COLONIAL TRADE.

THE Colonial connection of THE CHEMIST AND DRUGGIST is unique. Our Colonial post-bag is the heaviest that goes out of London weekly. For more than forty years we have been cultivating the Colonies, with the result that The Chemist and Druggist is as well known in Colonial towns as it is in London, DRUGGIST is as well known in Colonial towns as it is in London, Liverpool, Manchester, or any other town or city at home. We do not rest on past achievements. British Colonies are growing all the time, and the circulation of the C. & D. must grow with that growth. Hence, with the object of bringing all Colonial buyers into touch with our advertisers, The Chemist and Druggist of April 25, 1903, will be specially circulated in the

The Colonial Issue of that date, in addition to subscribers throughout the United Kingdom and abroad, will go to buyers of chemicals, drugs and their preparations, perfumery and toiletpreparations, aerated-water supplies, &c., in South African Colonies, the East Indies, China, Japan, Australia, New Zealand, and other parts of the Empire. Our Publisher can tell all about it, and it is to him, at 42 Cannon Street, E.C., that advertisers should write for the space they require. We believe we may say, without fear contradiction that Turk Curry and Department of contradiction. for the space they require. We believe we may say, without fear of contradiction, that THE CHEMIST AND DRUGGIST is the only journal of pharmacy in the world that has reached the distinction of having Colonial offices. These are situated in three capitals of Australia, and conserve our Colonial interests. The inference is obvious: to get into touch with Colonial buyers of goods which this journal represents advertise in the Colonial Issue of April 25.

Summary.

THE LATEST STORE-PRICES are given on p. 574.

THE INVENTOR of gelatin suppositories is dead (p. 577).

Some curious reflections on homocopathy are contained on p. 587.

FURTHER DRUG-CONTRACTS are mentioned on p. 574 and

A HUNDRED PER CENT. is what P., D. & Co. arc paying (p. 601).

THE DEATH OF MR. JURITZ, a veteran chemist of Cape Town, is reported (p. 596).

Mr. C. W. Bridges, of Sloane Street, S.W., has died under sad circumstances (p. 601).

TRANSVAAL IMPORTS are improving greatly, as the most recent statistics show (p. 605).

THE HOUSE OF COMMONS STAKES (Lough up) is the subject of this week's cartoon (p. 586).

SCIENTIFIC PROGRESS is this week comprised in reports of Societies, beginning on p. 579.

THE ether-solubility of citric and tartaric acids has been determined by Mr. Joseph Tait (p. 581).

A DISPENSING-ERROR in Manchester has nearly caused the death of Mr. Wilson Barrett (p. 574).

MR. ALDERMAN Cox, of Brighton, one of the oldest pharmacists in England, died on Monday (p. 596).

WE SINNED WOEFULLY in saying what we thought about the weak points of the Pharmacy Bill (p. 598).

A GOOD LETTER to write to M.P.s in regard to the Pharmacy Bill and the Poisons Committee's report will be found ou p. 585.

THE CUSTOMS CONFERENCE in South Africa induces our Cape correspondent to make some observations and reflections (p. 605).

The production of iodine from nitrate liquors was described by Dr. W. Newton to the Society of Chemical Industry this week (p. 579).

We select from the recent appeal-cases under the Sale of Food and Drugs Acts some Obiter Dicta that should be remembered

Mr. J. Reid shows how the protection of the prices of infants' foods have affected the sale of those which are not protected (p. 598).

MESSRS. R. A. SINCA (906 marks), H. C. S. Booth (826 marks), and H. M. Corke (779 marks) have gained Naval Hospital dispenserships.

MR. GEO. PETER POND, the Fleet Street chemist, had to pay eleven fines at the Mansion House this week in respect to unstamped medicines (p. 593).

RADIUM still attracts attention in regard to the heat and light it gives out. Sir Oliver Lodge gives an understandable explanation about the matter (p. 590).

THE PHARMACY BILL AND THE POISONS COMMITTEE'S REPORT have been discussed by several provincial Associations. See the Winter Session section (pp. 581 et seq.).

EXETER CHEMISTS AND GROCERS have discussed together the sale of proprietary medicines, resolving to get non-protected articles on the P.A.T.A. list (p. 584).

THE BUBBLES OF CARBONIC-ACID GAS which adhere to the

THE BUBBLES OF CARBONIC-ACID GAS which adhere to the insides of syphons and in glasses stick there because the surface is not absolutely clean, so Lord Rayleigh says (p. 579).

THERE are millions invested in drug companies. "Yes," says "Xrayser," "but how many more millions by individual chemists whose rights the inqualified companies usurp?" (p. 587).

MYSORE SANDALWOOD TREES are threatened with au cpidemic of disease, which is receiving the attentiou of Government officials. Incidentally, observations have been made on the yield of essential

OUR AUSTRALASIAN PAGE deals with the following subjects, amongst others: Inter-State reciprocity, Registration of Firms Act (N.S.W.), Customs' decisions, poison bottles, and apprentice-indentures (p. 578).

This is a holiday-week, and business is thereby curtailed. The only change of note is a slight reduction in "official" quinine, and the market in second-hands is flat and easier. Tartaric acid is firmer, and buchu has been in good demand (p. 602).

"When the Time Comes" the Pharmaccutical Council are to produce more evidence about poisons. So Mr. W. G. Cross says (p. 581). At the Liverpool Chemists' Association meeting the Council were strongly condemned for missing the matter when the time came two years ago (p. 582).

English Mews.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

A farm-servant was fined 5*l*, and costs at Scunthorpe on April 1 for poisoning four horses by giving them sheep-salve.

Mr. F. Moss, chemist and druggist, has been granted an off wine-licence for his premiscs at 239 Cheltenham Road, Bristol.

A Leicester photographer, named Varley, has been committed for trial on a charge of stealing a bicycle belonging to Mr. S. H. Jarvis, chemist and druggist, Sileby.

Boots Cash Chemists, in order to induce the public to purchase their spring-cleaning preparations, are offering 16*l*. in prizes for the best testimonials on their goods.

At Driffield on April 2, John Stockton, shopkeeper, Nafferton, and his assistant (William Hall) were each fined 5s. and costs for selling sal volatile 29 per cent deficient in ammonia.

A double primrose at St. Germans has been sent to the Plymouth Borough Museum by Mr. H. P. Hearder, chemist, Westwell Street, Plymouth. The flower has a double corolla, and resembles a double primula.

A chemist's assistant, Charles Bean, was charged at Bath on April 6 with stealing 1*l*. from his employers, the Bath Drug Company, 11 Abbey Churchyard. After hearing considerable evidence the Bench dismissed the case.

At Bow Street on April 4, Charles Richard Valentine, the promoter of a meat-juice company bearing his name, was committed for trial on charges of perjury and failing to disclose the whole of his assets when bankruptcy proceedings were taken against him.

Mrs. Annie Collins, a shopkeeper, at Holme-in-Spalding-Moor, was fined 5s. and costs at Market Weighton on April 1 for selling sweet spirit of nitre not up to B.P. standard. On April 2, for a similar offence, John Dobson, grocer, of Nafferton, was fined 10s. and costs.

At North London Police Court on Tuesday, Arthur Ordway Goodrich, of Wellington Road, Bow, was fined 10s. and 12s. 6d. costs for selling as olive oil an article which, on analysis, proved to be mineral oil. It was explained that the defendant has twenty-eight separate shops spread over various parts of London, and carries on the business of an oil and colour man.

The West Ham Board of Guardians have just opened their new infirmary at Whipps Cross Road, Leytonstone, the accepted tender for the erection of which was 186.665%. The dispensary is provided in a detached building connected with the main corridor at the ground-floor level, and contains in addition to the dispensary an office, the basement, or lower ground floor, being occupied by the drug-store.

Contracts.

Further contracts have been effected as under:-

Bolton Board of Guardians.—Mr. J. E. Sheppard, of 80 Deansgate, Bolton, for carbolic soap; Messrs. W. Priestley & Co., of Deansgate, Bolton, for roll sulphur.

Itchin Urban District Council.—Jeyes' Sanitary Compounds Company, for carbolic acid; Mr. J. Pell, for carbolic oil; Messrs. McDougal Brothers, for disinfecting-powder in casks; Mcssrs. Lankester & Crook, for sulphate of iron.

Salford Town Council.—Messrs. I. Bentley & Co., of Salford, for castor oil, at 2s. 2d. per gal.

Alleged Dispensing-error.

A paragraph is going the rounds of the newspapers to the effect that, while playing in Manchester last week, Mr. Wilson Barrett was nearly poisoned by aconite supplied in over-dose by a Manchester chemist. A letter addressed to Mr. Wilson Barrett's manager from Mr. F. H. Westmacott, F.R.C.S., and published in the Liverpool Post, states that Mr. Westmacott was called to Mr. Barrett, whom he found suffering from aconite-poisoning. He prescribed for him, but later on the patent collapsed; a subcutaneous injection of digitalin was administered, and after some hours Mr. Barrett recovered. Dr. Westmacott considers that Mr. Barrett had a miraculous escape, and asserts that the cause of the poisoning was an error by a chemist in dispensing aconitine in a pill, whereby double the maximum dose was administered.

Naval Dispenserships.

The following table shows the results of an examination held on March 12, 1903, and following day, of candidates nominated to compete for three situations as dispenser in H.M. naval hospitals at home and abroad:—

In Order of	In Exa- mina-		Pharmaceutical Chemistry	Materia Medica	Recognition of Chemicals and Drugs employed in Medicine	Practical Pharmacy, &c.	. -	Maria
Merit	tion	Maxima .	300	300	300	300		1,200
1	2	Sinca, Reginald Arthur	183	243	180	300	Suc-	906
2	1	Booth, Herbert Cyril Swanley	196	230	150	250	cessful candi-	826
3	4	Corke, Harry Male lm	194	215	150	220	dates	1779
_	3	Unsuccessful candidate	157	146	100	250		653

The unsuccessful candidate failed to pass a qualifying examination in materia medica and in recognition of the chemicals and drugs employed in medicine.

Store-prices.

The following "alterations" and "additions" are noted in the Army and Navy Stores Circular for April:—

ALTERED.—Jeyes' powder, 10s. 6d. per cwt.; cod-liver oil (veterinary), 7s. 6d. per gal. (tin 6d. extra); hornicura, 3s. 6d. per tin.

ADDED.—Alexander's corn and bunion shields, $10\frac{1}{2}d$. per box; antiphlogistine, 1s. 9d. per small jar; antitoxin serums (prices not stated); cod-liver oil (Norwegian), 12s. 6d. per gal. (jars 1s. extra). "This oil is of the finest quality obtainable, is nearly tasteless, and easy of digestion." Hovis infants' food, 1s. 1d. and 1s. $9\frac{1}{2}d$. per bottle; Vegox, 6d., 10d., and 1s. 8d. per jar; Virol, 11d. 1s. 6d., 2s. 8d., and 4s. 1d. per jar; Freeman's capsules for dogs, cats, and poultry, in boxes, 1s., 2s. 6d., and 5s. ("The Society is the sole retail London agent for Freeman's gelatin-capsuled medicines.") Selvyt complexion cloth, 10 inches square, 9d.; "Savopad" (soap-substitute), 7d. each, 6s. 6d. per dozen.

We observe that the "Marvel" whirling-spray syringes and Mennen's talcum-powder are still quoted at 12s. 6d. each and $10\frac{1}{2}d$. per tin respectively.

Sheffield Notes.

Councillor A. Russell Fox, chemist and druggist, has been appointed by the City Council a member of the Board of Overseers of the township of Sheffield.

The address of Mr. William L. Currie is being industriously circulated amongst local pharmacists. It is accompanied by a circular soliciting votes for Messrs. Storrar and Currie.

The meeting of the local Pharmaceutical and Chemical Society fixed for April 15 has been postponed to April 22, owing to Easter week. At the meeting Mr. John Austen, the President, is to read the second of his fascinating papers on old Sheffield pharmacists.

Mr. Reeve Holyoake Field, chemist and druggist, has removed his business from 121 Infirmary Road to 157 Upperthorpe Road. He has been in Penistone Infirmary Road for about ten years, and took the business over from Mr. Wm. Stephenson, an old Sheffield pharmacist, who is said to have been the first to retail aniline dyes in the town. The old premises (which formed part of the block next to the grounds of the Royal Infirmary) are to be pulled down for street-improvements.

Local chemists and medical men are suffering from a severe attack of "Moseley's Bonnie Baby Food." This food was formerly manufactured at Heeley, Sheffield, but was recently taken over by a syndicate under the title of "Moseley's Food (Limited)." The syndicate have removed the manufactory to Stockport, where they have taken the large factory lately occupied by Messrs. Faulders, jammanufacturers, and arrangements are being pushed forward to bring the food to the notice of the trade.

In reference to Mr. E. Wood's removal (page 539), the following more precise particulars are of interest:—

Mr. E. Wilson removed the business from the bottom of Young Street to new premises at the corner of Cemetery Road and London Road (not Lansdown Road). Mr. Wilson succeeded the late W. V. Radley (with whom Mr. E. Wood served his apprenticeship) as local secretary of the P.S.G.B. Mr. Wood gained the Hills prize in January, 1874. After leaving Messrs. Bell & Co, in 1877, his uncle gave up the business, and it was removed to No 6 London Road, and subsequently, in 1838, to Mr. Wood's late establishment.

In reference to the paragraph under "Business Changes" (C. \mathcal{O} D, March 21, p. 467), we learn that Mr. J. Thompson Appleton is not the son of Mr. A. J. Appleton, of Darnall, but the eldest surviving son of Mr. Algernon Appleton, retired wholesale druggist, of Attercliffe, who is the eldest son of Mr. J. H. Appleton. Mr. J. Thompson Appleton is the great-grandson of Mr. Thomas Webster, who carried on the business lately given up by Mr. Carr, Devonshire Street, and Mr. John Webster is his great-uncle.

The City Council, at their meeting on April 8, re-appointed Mr. Alfred H. Allen, F.C.S., as analyst for the city for the ensuing year. The salary of the office is 100l. for the twelve months, and Mr. Allen is required to analyse and report on samples of drugs to a number not exceeding 150 per annum, and for each sample submitted to him over that number he is to be paid an additional fee of 10s. 6d. In his annual report to the Council, Mr. Allen reported that during the past year he had received 597 samples from the inspectors under the Sale of Food and Drugs Acts, including four samples of sweet spirit of nitre, five samples of compound liquorice-powder, eight samples of camphorated oil, five samples of laudanum, two samples of medicine, and nine samples of spirit. Among the samples received in addition from the Medical Officer of Health were one of homocopathic tincture of nux vomica, five samples of food to be examined for lead, and one bun in which the presence of copper was suspected.

The L.C.C. and Early Closing.

At the meeting of the London County Council on Tuesday, the Parliamentary Committee reported that they had been in communication with the Public Control Committee with regard to Lord Avebury's Shops (Early-closing) Bill, and the latter Committee had suggested that the Bill should be amended so as to enable the Council to move in the matter at its own option, without waiting for an application to be made to them by shopkeepers. The Committee accordingly submitted a motion to that effect and approving of the measure; but Mr. Pomeroy moved as an amendment that the Council express no opinion on the Bill. The matter was adjourned.

The Dobbs Campaign.

At the usual monthly meeting of the Council of the Royal Agricultural Society of England, held on April 1 at 18 Hanover Square, W., with the Prince of Wales (President) in the chair, it was agreed, on the motion of Mr. Bowen-Jones, Chairman of the Chemical and Woburn Committee, to address a communication to the Lord President of the Council expressing the hope that he would, in giving effect to the recommendations of the recent Departmental Committee on the Sale of Poisons, consider the desirability of allowing persons other than registered pharmaceutical chemists to sell (under proper restrictions) articles containing poisons that were in common use among farmers and horticulturists.

A general meeting of the Leicestershire Chamber of Agriculture was held at Leicester on April 4, and among the communications was a letter from Mr. Dobbs, solicitor, of Worcester, asking the Chamber to pass a resolution with the object of supporting a Bill to allow compositions to be used

for farm or horticultural purposes—for growing hops and spraying potatoes, &c., and which were poisonous—to be sold by dealers in agricultural implements, seedsmen, and dealers, instead of being only sold by qualified chemists, as now. Mr. John Harrison, the Secretary, said that personally he was not in favour of the proposition. He did not like handling poisons, and he did not think people who had not the qualification should deal with such articles.

Charges of Thieving.

At Manchester on April 6, a labourer was sentenced to six months' hard labour for attempting to break into the shop of Bocts, Cash Chemists (Limited), St. Ann's Square, Manchester, with intent to commit a felony.

At Plymouth Police Court on April 6, Arthur Edwards, a vocalist, was charged with stealing a waistcoat and a metal watch, of the value of 30s., belonging to Mr. C. H. Menhinnick, chemist, 6 Millbay Road. After hearing the evidence the Bench granted a remand, refusing bail.

A gang of thieves appear to be at work in Leeds, and one of the places visited on April 6 was the premises of Mr, Fred White, "Kompo" Works, Benson Street, North Street. The burglars systematically ransacked the building, but were illrewarded for their pains. The safes were too formidable to break, and the only articles missing are a clock, a clockwatch, a pair of spectacles, and soveral bottles of spirits.

What was the Herb?

A market-gardener at Bramley, named Sanderson, took infusion of wormwood whenever he had a headache, and infusion of wormwood was the staple medicine of his family. Sanderson grew the herb in his own garden, but about two months ago he ran short, and Mrs. Sanderson purchased a pennyworth from a peripatetic herb-hawker, who sells such herbs as pennyroyal, sage, and thyme. She thought the herb had an unfamiliar look, but the vendor assured her it was all right, and she gave her husband some of an infusion which she prepared at once. The infusion was a darker yellow than that made from their own herb, but Mr. Sanderson drank off a large quantity. Almost at once he began to feel ill, and did not recover for a day or two. He worked "on and off" until three weeks ago, when his lips began to swell, and he took to bed and lingered until April 6, when he died. The doctors declare the "wormwood" infusion to be the cause of the illness, and an inquest is to be held. The hawker has not been seen since, and is quite unknown in the locality. None of the wormwood was kept, as the first doctor called in ordered Mrs. Sanderson "to throw the stuff out "—advice which she followed,

The Poisoning Record.

Since our last report thirteen deaths have taken place from poisoning. Five were laudanum cases, the victims being a drover at Louth, a labourer at Colne, a young married woman at Swalwell, and "John Young, a chemist's assistant, late of Hudson Road, Sunderland," -It was stated at the inquest that Young had been to South Africa with the R.A.M.C., and was invalided home. A young lady to whom he was engaged said he had acted very strangely recently, and his dead body was found in his bedroom. At an inquest held at Durham County Hospital on the body of Herbert Binns (46), found in a field on the previous day, it was stated that deceased went to a chemist at Lancaster, where he resided, and, on the pretence that he was going to poison a dog, obtained sixpennyworth of prussic acid. ' Before obtaining the poison, however, he had to take a witness with him. He then left for Durham, and next morning the empty prussic-acid bottle was found lying beside the dead body. Paul Fuller, a commission-agent, poisoned himself with morphine at a Richmond hotel, and a Peckham cheesemonger named Farrant drank oxalic acid in his tea, and A Manchester salesman named Massey committed suicide on April 4 with carbolic acid. A french-polisher at Gateshead drank a solution of bichromate of potassium; Ada Dring, 1 year and 8 mouths old, died at Colwick through sucking match-heads; a Hornsey nursemaid, Rose Rebecca Stringer, had a tiff with her sweetheart, and poisoned herself with sugar of lead; and a man named Dennis died in Birmingham General Hospital from the effects of poisoning by sulphuric

acid. At an inquest held at Penwortham on the body of a 2-months-old child it was stated that another child, 7 years old, had removed the tube from the baby's feeding-bottle, and placed it in a bottle of "soothing-syrup." The baby nearly emptied the bottle, which contained laudanum, and died as a consequence. The Coroner and doctor condemned the practice of giving laudanum in "soothing-mixtures" to children. The doctor said he regarded it as almost a criminal offence.

Masonic.

At the installation meeting of the Lodge of St. John, 1306, held at the Guildhall Tavern, Gresham Street, E.C., on April 1, Brother Charles Spencer, chemist and druggist, was installed Worshipful Master. W. Brother Spencer (whose health, all public dispensers will be pleased to learn, has improved) was initiated in November, 1893, and was exalted into Royal Arch Masonry, Domatic Chaper 177. in March, 1897. He founded the Hugh Owen Lodge, 2593 (composed of the members of the Poor-law service only) on February 14, 1893. He is a Life Governor, and has served the flice of Steward, of the Royal Masonic Benevolent Institution and the Royal Masonic Institution for Girls. W. Brother Spencer was formerly dispenser at St. Marylebone Infirmary.

The annual installation meeting of the Ga'en Lodge took place at the Freemasons' Hall on Monday, March 6, when Worshipful Brother T. H. W. Idris was installed Worshipful Master for the ensuing year. In the unavoidable absence of W. Bro. Carteighe, W. Bro. Fred. Bascombe acted as Installing Master. There was a large gathering of brethren, and the Grand Officers present were Lieutenant-Colonel Probyn, P.G.T., Dr. Sandberg, Mr. W. Thomas, and Mr. J. Sadler, G.T. During the evening an excellent programme of music was rendered under the able direction of Bro A. Fox, Past Master of Orpheus Lodge. The officers appointed were: W. Bro. T. H. W. Idris, P.M., W.M.; W. Bro. M. Carteighe, P.M., I.P.M.; Bro. C. J. Strother, S.W.; Bro. J. J. Arrow, J.W.; W. Bro. H. W. Roach, P.M., Treasurer; W. Bro. J. B. S. Lancaster, P.M., P. Prov. G. Std. B., Surrey, Secretary; W. Bro. W. Judd, P.M., 1884, S.D.; Bro. J. H. Arrow, J.D.; W. Bro. W. J. Rogerson, P.M., P. Prov. G. D.C., Notts, D.C.; Bro. J. T. Humphrey, Assistant D.C.; W. Bro. G. R. H. Clark, Organist; Bro. W. P. Want, I.G.; W. Bro. Fred. Bascombe, P.M., Steward; Bro. G. H. Peters, Assistant Steward; Bro. G. Harrison, Tyler.

Irish Mews.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Commercial Travellers' Benevolent Institution.

The annual meeting of the Dublin branch of this institution was held at the Central Hotel, Dublin, on April 4. Among the officers elected for the ensuing year were Mr. H. C. Grimes (Evans Sons Lescher & Webb, Limited) Vice-Chairman, and Mr. T. White (Harker, Stagg & Morgan, Limited) committeeman.

Varnish-making in Ireland.

Messrs. Harrington Brothers, Shandon Chemical-works, Cork, have circularised several Boards of Guardians in Ireland, asking them to stipulate in their advertisements for paints, colours, and varnishes, that goods of Irish manufacture should be supplied. The firm have recently laid down new plant for the manufacture of these articles.

The Lowest Tender.

At the last meeting of the Birr Guardians a letter was read from the Local Government Board asking why the lowest drug-tender was not accepted, which was not that of Messrs. Golden & Co. The Guardians resolved to ask the Local Government Board to sanction the acceptance of Messrs. Golden's tender, as the difference was so small.

Medicine-contracts.

The following Boards of Guardians have placed the contracts specified:—

Clones.—Medicines: Mr. J. Netley, Dugannon, at 25 per cent. off. Surgical appliances: Messrs. J. Clarke & Co., Belfast, at 25 per cent. off.

Kells.—Medicines: Mr. P. N. White, Sligo, at 161 per cent. abatement. The other tenders were: Messrs. Boileau & Boyd, Dublin, and Messrs. S. Connor & Sons, Newry, 15 per cent. off. The Clerk said that the tender of Boileau & Boyd had been set aside as that firm had not given satisfaction last year. Surgical appliances: The Medical Supply Association, at $28\frac{1}{4}$ per cent. off.

Lismore.—Medicines: The Cork Chemical and Drug Company, at 21 per cent. off.

Portumna.—Messrs. Golden & Co., Birr (the old contractors), at $17\frac{1}{2}$ per cent. off. The following were the other tenders: Messrs. P. A. Leslie & Co., Dublin, at $20\frac{1}{2}$ per cent. off; Mr. P. N. White, Sligo, at 11 per cent. off; Mr. English, at 5 per cent.

Rathdrum.—Medicines: The Apothecaries' Hall, at 20½ per cent., accepted on the ground of convenience. The other tenders were: Messrs. McMaster, Hodgson & Co., at 13 per cent. off; Messrs. Sumner & Co., Liverpool, at 22½ per cent. Surgical appliances: Messrs. Sumner & Co., Liverpool, at 22½ per cent. off. The other tenders were: The Medical Requisite Company, at 4 per cent. off; and the Medical Supply Company, at 15 per cent. off.

Shillelagh.—Medicines: Messrs. Thacker & Hoffe, Dublin, at 15½ per cent. off. The other tenders were: Messrs. McMaster, Hodgson & Co., Dublin, 12½ per cent. off; Mr. P. L. White, Sligo, 10½ per cent. off; Messrs. Hunt & Co., Dublin, 13 per cent.; Messrs. R. Sumner & Co., Liverpool, 15 per cent. Surgical appliances: The Medical Supply Company, Sligo, at 20½ per cent. off. The other tenders were: Messrs. Sumner & Co., Liverpool, at 15 per cent. off; Messrs. Smith & Sheppard, Dublin, at 15 per cent. off; Messrs. Fannin & Co., Dublin, at 7½ per cent. off; and the Medical Supply Association, at 6 per cent. off.

Westport.—Medicines: Messrs. P. A. Leslie & Co., Dublin, at $26\frac{1}{4}$ per cent. off standard prices. Surgical appliances: Messrs. John Clarke & Co., Dublin, at 26 per cent. off.

Scotch Mews.

Personal.

Bailie William Alexander, chemist and druggist, has been unanimously re-appointed Chairman of the School Board of the Burgh of Banff.

Mr. W. L. Ker, chemist and druggist, whose business in High Street, Dunfermline, was recently acquired by Messrs. D. Gilmour & Son, has given up retail trade, having fitted up premises at Ladysmill, where he will carry on business as a manufacturing chemist.

Fire.

The Edinburgh Fire-brigade were called out early on April 4 to an outbreak of fire in the shop of Mr. J. D. Walker, chemist and druggist, at 187 Gorgie Road. The fire originated in a back room used as a store, which contained at the time a large quantity of drugs. These were all destroyed, and the room very much damaged. The front shop was also severely damaged by water and smoke.

Edinburgh Pharmacy Athletic Club.

A general meeting of this Club was held in 36 York Place, Edinburgh, on Thursday, April 2, Mr. A. G. Paterson (Vice-President) in the chair. The purpose of the meeting was to consider the advisability of forming an eleven-a-side football-team from Club members, and it was decided that an eleven should be organised. Mr. John Harley, 104 South Canongate, was elected Sceretary, and Messrs. C.R. Brown, Hadden, Mackay, Murray, McDougall, Richardson, E. O. Rowland, and Weir were appointed members of committee.

Must Keep Open Shop.

Sheriff Henderson Begg has given judgment in the action brought by Mrs. Cruickshank against Mr. John Alexander chemist and druggist, 626 King Street, Aberdeen, particulars of which were given in our issue of March 28 (page 523). The Sheriff finds that, on a sound construction of the lease between the parties, Mr. Alexander is bound to use the shop in question as a chemist's and druggist's shop, and as that only; and that, in order to do so, he must have it open to retail customers, and carry on the business of a chemist and druggist therein. With these findings, the Sheriff continued the cause in order to give the defender an opportunity of stating whether he will undertake to give effect to these findings, and in what way.

Mr. Currie's Circulars.

Two circulars in reference to the candidature of Mr. W. L. Currie, of Glasgow, for the Pharmaceutical Council have been issued. One is signed by sixteen local pharmacists, and solicits support for Mr. David Storrar, the retiring Scotch councillor, and for Mr. Currie "as a fitting colleague to Mr. Storrar." As supporters the names are given of ladies and gentlemen in Dumfrics, Sheffield, Perth, Bridge of Allan, Gourock, Edinburgh, Kilmarnock, Leith, Greenock, Middlesborough, Liverpool, London. Neweastle-on-Tyne, Gravesend, Dundee, Dover, Dunfermline, Paisley, Exeter, Bradford, Hanley, Stenhousemuir, Rothesay, Ayr, Helensburgh, Port Glasgow, Arbroath, Portobello, Great Yarmouth, Birmingham, Sunderland, Motherwell, St Leonards, Linlithgow, Peter-head, Clifton, Buxton, and Lincoln. The second circular is signed by Mr. Currie. It discusses the question of titles, dispensing and compounding, proposed third subdivision of the Poison Schedule, registration of shops, preliminary examination and apprentices, unity and co-operation—the last with special reference to the fact that "the interests of English and Scottish pharmacists are essentially the same," and "there should be perfect unity of action among pharmacists north and south of the Tweed."

Dundee Notes.

Copies of the Pharmacy Bill have been sent to the principal chemists with the City members' compliments.

Sir John Leng, M.P., has handed his copy of the evidence taken by the Committee on Poisons to Mr. Wm. Cummings, 49 Reform Street, who will lend it to any member of the local Association who wishes it.

Glasgow Notes.

The demand for photographic goods has made a promising start.

Dr. D. S. C. Reid's business in New City Road is undergoing extensive alterations.

Boots Cash Chemists (Limited) have reduced the staff in the drug-department of their Sauchiehall Street shop.

The Old Drug-warehouse has removed to new premises further west to make way for the Improvement Trust at the Glasgow Cross.

Copies of Mr. W. L. Currie's election-address and the eovering letter recommending his election have been posted to every M.P.S. in Scotland.

It is suggested that something might be done to curtail Sunday hours by opening only in the evening. There is not usually much done during the day.

A movement on the lines of the Federation proposal is being set in motion to educate M.P.s as to the true inwardness of the report of the Committee on Foisons.

Mr. William Cowie, chemist and druggist, has secured the business at 170 Main Street, Maryhill, Glasgow, formerly carried on by Mr. Wm. Gardiner, who is to devote his sole time to his shop in Milngavie.

A chemist with an asthetic eye, who has been going the rounds, is greatly dissatisfied with the decorative schemes of local pharmacies. He says they are too conventional. The only consolation he offers is that even in classic Edinburgh things are worse.

french Mews.

(From our Paris Correspondent.)

THE GRANDE CHARTREUSE.—A liquidator, with full powers of administrator-sequestrator," has been named to prevent all removal of furniture and manufacturing-plant from the above monastery. This step appears to have been taken on account of the fact that the Carthusians had commenced to despatch their stills, &c., abroad.

NOTICE TO ASSISTANTS.—M. Crinon, of the General Association of French Pharmacists, has gone theroughly into this matter, and finds that the usual practice of the Courts has been to award assistants from two to four weeks' wages in lieu of notice, according to circumstances, but laboratory assistants (potters) are considered as unskilled labourers, and get only a week's notice.

The Reconstruction of Paris Hospitals seems at last likely to be scriously studied. A Superior Committee of Hospital Work has been appointed, and is to meet immediately after the Easter holidays. M. Mesureur (ex-Minister and now Director of Public Assistance) is Chairman, and the body includes five architects, five municipal councillors, and seven doctors—one of whom is Dr. Roux.

"A STUDENTS' FETE IN THE OLDEN TIME" is the subject of the painting by M. Weerts to be executed in the Cour of Honour of the Sorbonne (Paris Faculty of Sciences). The festival of the "Lendit," or "Parchment Fair," instituted by Charles the Bold, is there represented in all its picturesqueness and disorder. In the procession the Rector of the University is represented with the face of M. Greard, and this will probably induce visitors to seek for other contemporary portraits of the modern Paris scholastic world on M. Weerts' large and curious composition.

The Tiara of Saïtapharnes is still with us in the daily Press. An Austrian journal having stated that a Viennese museum to which it was offered had exacted a chemical examination, which the seller had refused, the Temps reporter interviewed M. Berthelot on the subject. Tho eminent savant has made a special study of the precious metals used by the ancients, and has shown how they differ from the similar metals used now. He told the Temps representative that up to the sixth century gold always contained traces of silver, and that the gold of the doubtful tiara might be analytically compared with the precious metal of which sundry well authenticated objects from the Tauride tombs are composed. So far as Egyptian art is concerned, he stated that the age of an object can be decided "within a century or two" by the nature of the alloy.

PHARMACY INSPECTION .- M. Guignard, Director of the Paris Superior School of Pharmacy, has addressed a circular to the professors who are members of the Visiting Committees for 1903. He quotes the instructions of the Minister of the Interior, which points out that all establishments should be visited and that three points should be assured: (1) that the titulary owner has a diploma, and personally manages his officine; (2) that the poison and serum regulations are observed; (3) and that the general quality of the medicaments is satisfactory. The Prefect of Police has also pointed out that a summons (proces verbal) should be drawn up when the officine, or poison-cupboard, is improperly kept, and recommends that deteriorated or badly prepared drugs and medicaments should be seized. M. Guignard also draws the attention of the inspectors to the saccharin regulations, and gives a list of pharmacists who have received saccharin during the last twelve months

GERMAN INDIARUBBER GOODS have gone up in price by 10 per cent. from April 6.

THE INVENTOR OF GELATIN SUPPOSITORIES.—One of the most respected Austrian pharmacists, A. von Grohs-Fligely. Vienna, died last month, aged 78. The introduction of gelatin suppositories is attributed to him.

WOMEN PHARMACISTS IN ST. PETERSBURG.—Permission to open a pharmacy in St. Petersburg has been granted to Miss Anna Kowalewska, M.D., a pharmacist. She is the second in the field, Miss Marie Lesniewski having opened a pharmacy there nearly two years ago, in which all the assistants are women.

Hustralasian Hews.

Chiefly from "The Chemist and Druggist of Australasia," March 2, 1903. 6d. per copy, post free.

MR. G. W. WILTON, Registrar of the Pharmacy Board of New Zcaland, and Secretary of the New Zcaland Band, is on this way to England. Mr. Wilton is expected to be away for nine months, and an acting-registrar has been appointed during his absence.

RECIPROCAL REGISTRATION.—The first applications for registration under the inter-State reciprocal arrangement scem to be those of Messrs. R. S. Lower and Kirby, both of New South Wales, who, on February 19, secured "provisional protection" from the South Australian Board. A South Australian was registered on February 11 in Western Australia, and at least one Victorian assistant has gone to New South Wales.

AN INNOVATION in the way of lectures has been started by the Northern Tasmanian Chemists' Assistants' and Apprentices' Association, Launceston. The Association get medical men to give them addresses. At the February meeting Dr. Thompson discoursed on the relations existing between the medical and pharmaceutical professions, and six other doctors are to lecture on such subjects as "First fid," "Poisons," "Anatomy," "Physiology," "Bacteriology," "Transport of Wounded," and "Testing.

NEW RECISTERS.—The N.S.W. register of Pharmacists for 1903 contains 841 names, an increase of forty-four over last year's list. According to the addresses given there are eight N.S.W. pharmacists living in England. The Dentists Register of N.S.W. contains 994 names. The New Zealand register for 1903 has on it 576 names, an increase of thirteen. Seven of the persons named reside in England. The register of Western Australia shows an increase of seven over the previous year, the chemists at present on the register being

THE REGISTRATION OF FIRMS ACT, now in force in New South Wales, provides for the registration of all businesses conducted in a firm-name. Firms already established are given to the end of June to comply with the regulations, while all new firms must be registered before commencing The fee is 5s. for each registration, and the particulars, when filed, will be open to the inspection of the public at a charge of 1s. for each search. Default, without reasonable excuse, carries a penalty of 21. for the first and 51 for every subsequent offence.

A KASPBERRY-CORDIAL STANDARD.—During the hearing of a case against a cordial-maker at the Brisbane City Court on February 16, for selling raspberry-cordial not of the nature, substance, and quality demanded, Mr. Arthur B. Chater, the public analyst, said raspberry-cordial should contain fruit-juice, cane-sugar, and 1 gr. of salicylic acid per pint, and might also contain a little vegetable colouring-matter. Thomas Maugham, pharmaceutical and manufacturing chemist, stated that raspberry cordial or syrup should the made with pure raspberry-juice, spirit of wine, and caneaugar, and should have a sp. gr. of 1 333. He had supplied taspberry-syrup to the British Government containing 12 to 12 per cent. of rectified spirit, and sold bottles of such a syrup for 12s. a dozen in England.

THE POISON-BOTTLE.—The Brisbane Traders' Association has had under its notice for some months the question of the Poisons Act, and at the meeting, on February 16 Mr. E. C. Blake, Registrar of the Queensland Pharmacy Board, was present, and at the invitation of the President addressed the meeting on the subject of the Sale of Poisons Act. In the course of his remarks Mr. Blake produced a bottle labelled "Ginger-beer," which he assured the meeting centained carbolic acid in solution. It had been purchased by him at a store. He stated that the Pharmaceutical Society is not in favour of enforcing the provisions of the present Act, seeing that the great bulk of the storekeepers have never been required to carry them out so far. Still, something should be done, as the death rate from poisoning is four times as high in Queensland as it is in England, and twice as high as it is in Victoria.

CUSTOMS DECISIONS.—The following decisions of interest to pharmacists have been recently issued:-

Sheet soap, as toilet soap, 3d. per lb.
Oils, salad and castor, in 5-oz. or \(\frac{1}{2}\)-piut bottles, invoiced or marked as reputed \(\frac{1}{2}\)-pints, 1s. per dozen.
Cloudy ammonia, 15 per cent.
Liquid peptonoids (Carnrick's), 7s. per gallon or 15 per cent., whichever is higher.

"Cresy-Phenol," free.

Mosquera beef-jelly (solid and liquid), 20 per cent.
"Force Food," 15 per cent.
Silver wire (for ligatures), 25 per cent.
Jodelite, free, but analyst must certify to its precise similarity

Bi-sulphide [sulphite?] of soda, even if mixed with sulphurous acid, for dyeing purposes, 20 per cent.

Dr. Scott's malted food, as infants' and invalids' food, free.

Heliotropin, free

Sucrema, as condition foods, 15 per cent. "Rough on Rats," 15 per cent.

APPRENTICE-INDENTURES.—In the Australian Pharmacy Acts provision is made for registration of apprentices at the commencement of the apprenticeship. There is often a laxity in lodging the indentures, and at the February meeting of the Pharmacy Board of New South Wales the Chairman drew attention to the fact that pharmacists who refuse to lodge indentures for registration at the Board's office within the prescribed time of three months from date of execution render themselves liable to a penalty not exceeding 10%. and in addition to that the indenture is void. Mr. C. A. Marshall considered this a very important matter, as in the event of any breach of the Act by a pharmacist a great hardship would be inflicted upon the apprentice, who would be called upon to give his services for a longer period than was intended by the indentures. As parents and guardians are not eognisant of the regulations governing the registra-tion of indentures, it is the bounden duty of pharmacists to see that no injustice is inflicted upon the apprentices through the failure of the masters to comply with the regulations.

RECIPROCITY.-How this came about between three Australasian States, embracing a population of nearly three millions, is thus tabulated in the C. D. A.:

N.S.W., July 10.—Notice of motion to reciprocate on basis of examination lapsed in absence of mover.

Qld., July 10.—Board offered to reciprocate with any State on basis of examination only.

S.A., July 17.—President of Pharmaceutical Society submitted to Pharmacy Board correspondence he had had with Victorian Registrar. July 31 fixed for its consideration.
S.A., July 31.—Special meeting of Board, wrote to Victorian Board asking if it would accept Register, and recognise the local pharmacy examinations.
Via August 13.—Record Jesifed, to the August 13.—Record Jesifed to the August 14

Vic., August 13.—Board decided to wait till N.S.W. was heard from.

S.A., August 21.—Copy of letter of July 31 sent to other Boards. Vic., September 10.—Board replied to Queensland that their proposal of July 10 could not be legally entertained.

W.A., September 10.—W.A. Council agreed to reciprocate with Queensland on basis of proposal of July 10. W.A. Council informed S.A. Board that till full inter-State reciprocity was established the Register of any individual State could not be accepted.

N.S.W., September 11.—Board received letter from S.A., and unanimously agreed to reciprocate on registers and local examinations

S.A., September 25.—Board agrees to reciprocate with N.S.W. on above terms.

W.A., October 8.—W.A. Council willing to reciprocate with N.S.W. on examination basis only.

N.S.W., October 9 — Board resolved to start reciprocity with S.A. from February 1, 1903.

Qld., October 9.—Qld. Board resolved to inform N.S.W. Board that proposal cannot be entertained.

proposal cannot be entertained.

Vic., October 15.—Special meeting of Board accepted proposals of N.S.W. Board of September 11, subject to conditions; telegraphed asking for conference at early date with Registrar and members of the Board.

N.S.W., October 23.—Special meeting of Board with delegates from Vic. agreed to reciprocate on same lines as with S.A.

Western Australia, with a population of over three millions, has since practically agreed to reciprocate pharmaceutically. Queensland, Tasmania, and New Zealand are still considering the question.

Winter Session.

Chemical Society.

THE usual bi-monthly meeting of this Society was held on Thursday evening, April 2, when the new President (Professor Tilden, F.R.S.) occupied the chair; this was also the first occasion upon which the new Junior Secretary (Professor W. P. Wynne) officiated. The first paper was contributed by Dr. M. O. FORSTER on

THE STEREOISOMERIC CAMPHORQUINONE DIOXIMES.

The author reviewed at considerable length the work of other camphor experts on this subject, and finally described the four isomerides which he has prepared; this number of isomerides is in accordance with the Hantszch-Werner hypothesis as to the stereo-chemistry of oximes and affords further support to this theory which is at present rather in disfavour with English chemists. In the discussion which followed, Dr. Armstrong congratulated the author on the distinct advance he had made in the chemistry of this subject and offered several suggestive criticisms regarding the constitution at present assigned to camphorquinone and its immediate derivatives. The next paper dealt with

REVERSIBLE ENZYMIC HYDROLYSIS

and was read by Mr. A. C. HILL. The author pointed out that he had in previous papers shown that when various enzymes are allowed to decompose maltose, the decomposition stops at a certain characteristic equilibrium point for each enzyme. The same equilibrium-points can be reached in the opposite direction by the action of the same cnzymes upon solutions of glucose. These observations point to the reversibility of enzymic hydrolysis. The author has recently been engaged in identifying the "reverted" products, and has obtained by the action of "yeast extract" upon solutions of glucose a new isomeride of maltosc, which he has named revertose," and which is optically inactive, and is therefore not identical with Fischer's isomaltose. This paper was the subject of a good deal of criticism; Dr. E. FRANKLAND ARMSTRONG pointed out that in his opinion the author laid too much stress upon the melting-point of revertosazon as a criterion of the difference between revertose and Fiseher's isomaltose, and suggested that the author should follow Fischer's example in not attaching great importance to this Mr. Hill with the remark that the only constant given by Fischer for isomaltose was the melting-point of its osazon. The authors of the remaining papers were absent, but the PRESIDENT suggested that Mr. Clayton's contribution on

COLOURED RAIN

should be read by the SECRETARY. It will be remembered that on February 28 last rain containing a considerable quantity of a reddish suspended matter fell in various parts of England, and it was suggested in many of the daily papers that the solid matter was probably some of the wolcanic dust from the West Indies. To settle this point Mr. Clayton analysed some of the material deposited by the rain, and found that its composition was practically that of ordinary dust from West Country roads, and he suggested that the high winds then prevailing sufficiently account for its presence in the air when the rain fell. Professor John MILNE, F.R.S., was not inclined to agree with this simple explanation of the matter, and stated that he had received over fifty samples of the deposit collected from various places in Holland, Belgium, Austria, and the United Kingdom: these samples are now being analysed by the officials of the Geological Survey, and the results are not yet available, but a preliminary microscopic examination has shown that the deposit contained spherules of a character suggesting cosmic origin.

Royal Institution.

The last Friday evening lecture before Easter is generally by Lord Rayleigh, and brings a good audicnce. On the evening of April 3 the subject was

DROPS AND SURFACE-TENSION.

The experiments were interesting. After demonstrating capillarity with a tube and coloured water, Lord RAYLEIGH got his assistants to show experiments exhibiting the formation of drops while he explained the factors that determine the formation of drops. Given the diameter of a dropping tube, the sp. gr. of the liquid, and the rate of flow, one needs only an undefined factor to tell the weight each drop will be. He has worked out this undefined factor. Incidentally he spoke of the attraction between glass and water; there is no such attraction between glass and mercury, and this was demonstrated in a curious way discovered by the lecturer. A cubc of glass was pressed inside a trough of mercury, and the image reflected on a screen showed the mercury oozing out from between the cube and the side of the trough. There the cube stuck because of the vacuum between the two glass surfaces. If the surface-tension which determines the formation of drops is overcome by pressure of the liquid, a stream is formed, capillarity being overcome. The same thing happens when ether-vapour is brought into contact with water held by capillary attraction in a tube. A bath of ether-vapour was brought over a tube so charged; the halfformed drop was seen to budge, and the whole contents ran out. The rotation of camphor on the surface of clean water was shown, and Lord Rayleigh stopped it by dipping his finger in the water. His finger was clean in the common acceptance of the term, yet it conveyed sufficient grease to the water to stop the rotation. A single layer of oilmolecules is sufficient to do this—that is to say, the diameter of the oil-molecule is one-millionth of a millimetre." The presence of dirt or grease has much to do with the formation of drops. Lord Rayleigh rather shocked his audience by telling them that the adherence of little bubbles of carbonic-acid gas to champagne-glasses and the insides of syphons is due to their being dirty, and when tiny drops gyrate over the surface of an aërated liquid they tell that the surface is not quite clean. The philosophic amongst the spectators reflected that Lord Rayleigh's standard of impurity was his own apparently immaculate finger, and as long as that is borne in mind, there is little horror in the air-belled syphon.

Society of Chemical Industry.

LONDON SECTION.

MR. W. F. REID took the chair at the meeting at Burlington House on April 6 of the London Section of the Society. Announcement was made that Dr. J. T. Hewitt, Dr. Bernard Dyer, and Messrs. T. Tyrer, J. Connah, and R. J. Friswell had been placed on the committee in place of members who, according to the rules of the Society, retire.

The first paper was by Dr. W. NEWTON on

THE PRODUCTION OF IODINE FROM NITRATE LIQUORS.

The paper, which was illustrated by lantern-slides, referred to the moribund condition of the kelp-industry, which would be extinguished altogether if the Chilian manufacturers choose to lower their prices. With iodine at 6d. an ounce the kelp-industry only just yields a profit; but iodine being a by-product with nitrate manufacturers can be produced much below that sum. Photographs were shown of the nitrate district of South America, and the lecturer then went on to tell how iodine is separated from the mother liquor of the nitrate crystallising tanks. Crude carbonate of soda is first made by burning a moistened mixture of coal and nitrate of soda. This salt, in solution, is pumped to a tank at the top of the iodine-house and the fumes of burning sulphur drawn through the liquid, a sulphide solution with free sulphurous acid resulting. This liquid is then run free sulphurous acid resulting. into the mother liquor from the nitrate tanks which contains iodine as iodate of soda or potash. The iodine is released as iodic acid, and air blown through liberates iodine, which sinks to the bottom. The surface liquid is drawn off, the crude iodine washed with water, squeezed in a press, and re-sublimed in tubular retorts connected with a line of drain-pipes, in which the iodine deposits. The iodine is scooped out of the pipes and packed in oaken kegs, which are then tied up in hay and canvas and shipped to Europe. There are occasional explosions in the subliming retorts,

which are probably accounted for by the presence of iodide of nitrogen, although Dr. Newton is inclined to blame faulty setting of the retorts or unequal heating. The export-duty on iddine is 41, 10s. per 100 lbs., about \(\frac{2}{3}d. \) per oz Reference was then made to the use of iodine, iodides, and iodoform in medicine, and it was stated that if iodine was cheaper it could be more largely used as a disinfectant. A small quantity vapourised in a room is, Dr. Newton said, of great service in the treatment of lung-diseases. The price, however, is not likely to be cheaper whilst the English Nitrate Trust pursue their present policy of restricting the output instead of finding out fresh outlets for their product. The process of obtaining iodine is a wasteful one, and it is a serious thing for the world that so much waste is permitted, but as long as the price is kept-up to 9001, a ton the Trust does not oarc what happens.

DISCUSSION.

Dr. MESSEL thought it is possible for iodide of nitrogen to be formed with iodine, as only crude chemicals were used in the production. Dr. DVORKOVITCH said that if iodine were cheaper its oxidising power could be taken advantage of in connection with the separation of sulphur compounds in petroleum. Iodine is a very effectual oxidiser in such a case, and has little effect on the hydrocarbons. Iodine is also an excellent disinfectant. Some years ago the speaker found that sheets moistened with alcoholic solution of iodine were a more efficient disinfectant in infectious cases than either chlorine or permanganate of potash. Dr. HART pointed out that there is plenty of iodine available, but the uses are few. Iodine-making causes considerable deterioration in plant, owing to its corrosive action. The competition in the iodine-industry does not come from Scotland now, but from Japan. If the price of iodine were reduced to 4d, there would be no more sold. Another member thought that if iodine were cheaper it could be used in gold-extraction in place of bromine or chlorine. Mr. KYNASTON mentioned the use of iodine in extracting silver from copper liquid. The Chair-MAN said it will not do to rely on the medical uses of iodine, but its value in extracting precious metals might be taken advantage of. The use of iodoform is becoming more restricted, the more recent practice of the surgeon being to keep a wound from access of air by means of an impermeable film. Dr. NEWTON, in reply, contended that part of the profits of the Nitrate Trust should be devoted to finding new outlets for iodine. Something will have to be done soon, as the Chilian Government will not stand the present waste

The next paper was by Mr. WATSON SMITH, in which he suggested a modification of

COFFIGNER'S REACTION.

The reaction consists in dissolving Prussian blue in strong hydrochloric acid, augmenting the solubility by the addition of an alcohol of the aliphatic series. Mr. Watson Smith finds that formic, acetic, propylic, and butyric acids increase the solubility more than the alcohols, and that amyl neetate can take the place of hydrochloric acid. In each case a colourless solution is obtained, which may be of use to dyers. A piece of cotton or silk dipped in the solution and then washed with water is dyed blue, water precipitating Prussian blue in the fibre of the cotton or silk.

There was a short discussion, in which Mr. Hooper suggested that glycerides might also have solvent action in Coffigner's reaction; and Mr. Watson Smith also stated that turpentine has a solvent action, but its immiscibility with water is against it.

The last paper was by Dr. A. DUPRÉ on

THE EXPLOSION OF POTASSIUM CHLORATE AT ST. HELENS.

The paper was a sort of reply to Mr. Guttmann's evidence at the inquiry that the explosion was due to a rafter falling on the fused chlorate, the official view (Colonel Ford and Dr. Dupré's) being that the cause was rapid heating of the bulk of the chlorate. Dr. Dupré referred to Mr. Guttmann's experiments as the "broomstick theory."

In the discussion which followed, Mr. KYNASTON, who heard the explosion, could not fit in all the facts with Dr. Dupré's theory; and Mr. GUTTMANN'S reply was a crushing one. Dr. Dupré is to give a written reply to the criticism on his paper.

MANCHESTER SECTION.

THE annual meeting of the members of this Section was held at the Technical School, Manchester, on April 3, Mr. Ivan Levinstein in the chair.

The Chairman's term of office having expired, Mr. J. Carter Bell, who has held the post of Secretary for twenty years, was appointed Chairman of the Section for the ensuing year, and Mr. J. Hübner was appointed Secretary in the room of Mr. J. Carter Bell.

Mr. HERBERT PORTER read a paper on "Draughts and Currents in Vitriol Chambers." His remarks were illustrated by a number of diagrams and a splendid model, with a plateglass chamber, in which the various experiments could be readily seen by the audience.

YORKSHIRE SECTION.

At the meeting of this Section at Bradford, on March 30, Messrs. F. W. Richardson and Percy Hollings communicated a paper on the

TINTOMETRIC ESTIMATION OF, NITRITES AND NITRATES IN WATERS.

They find that with Lovibond's tintometer the alpha naphthalymine and sulphanilic-acid process gives the purest red, and one readily comparable with Lovibond's colour-units. Sulphanilic acid and resorcin give a pure yellow, but the conditions for obtaining perfectly uniform results with these very delicate tests are still under consideration. The authors, when dealing with a water containing both nitrites and nitrates, boiled down with a little hydrogen peroxide in order to ensure complete oxidation of the nitrites; the phenol method being then applied to the residue, and the colour produced by the nitrite, after conversion into nitrate, being allowed for after the nitrite has been determined.

Messrs. W. M. Gardner, B. North, and Λ . H. Naylor presented the results of some experiments in the

METHODS OF STANDARDISING PERMANGANATE OF POTASH,

and the use of this substance for the volumetric estimation of iron. They find (1) that an accurate permanganate-solution may readily be prepared by crystallising the salts twice from a solution which does not come in contact with oxidisable material, the crystals being dried at 100° C. in a crystallising-dish, after draining off the mother-liquor; (2) that if necessary to standardise it, either ammonium oxalate, oxalic acid, or ferrous ammonium sulphate may be used with extremely accurate results; (3) in the estimation of iron in a commercial sample of metallic iron it may be preferable to standardise the permanganate-of-pot-sh solution with iron wire, but the method is only reliable when the graphitic carbon present is removed by filtration previous to titration.

The annual election of officers resulted as follows:—Chairman, Mr. J. E. Bedford; Vice-chairman, Mr. G. W. Slatter, A.R.C.Sc., F.I.C.; new members of Committee. Messrs. F. W. Richardson, W. M. Gardner, Thorp Whitaker, Ward, and H. R. Pocter; Hon. Secretary and Treasurer, Dr. A. Turnbull.

Chemists' Assistants' Association.

A MEETING was held at 73 Newman Street, W., on April 2, presided over by Mr. A. Latreille. Some exhibits shown by members provided subjects for discussion, which was, however, of a rather desultory character. Mr. R. E. LOWNSBROUGH showed and described some botanical specimens. They included a specimen of

STROPHANTHUS DIVERGENS,

indigenous to Southern China, which had been sent by Mr. A. C. Franklin, a former member, now at Hong-Kong. This specimen, although rather the worse for its long journey, Mr. Lownsbrough had succeeded in mounting. Mr. Lownsbrough also stated that upon examining some

LINSEED-MEAL

which had been kept at the bottom of a cask in a dark cupboard, it was found to be invested with "mites." On

the meal being exposed to the light the majority of the "mites" perished, sunlight being apparently fatal to them. A portion of the meal was shown by Mr. Lownsbrough under the microscope, and evident traces of the rapacity and cannabalism of the "mites" became apparent in the number of legs and other portions of their anatomy which were scattered about. It was suggested that this was evidence that either the linseed-meal was (a) of very poor quality as an article of alimentation, or that (b) it had such a fattening effect upon the organisms that the temptation to give way to a depraved appetite became irresistible. Instances of a similar nature were adduced; thus a bottle of lactopeptine, which on being examined after the lapse of some months was found to contain several living moths.

OTHER EXHIBITS

included a very simple but ingenious filtering-apparatus suggested by Mr. Newton Spyers. The object of the arrangement is to keep an ordinary filter-paper automatically full of the liquid to be filtered in such a manner that it cannot run over. Mr. Matthews exhibited some very fine specimens of various animal glands now used in medicine, and also some sapota-seeds.

Mr. Garsed mentioned that he had read recently of hydrogen peroxide being produced in a crystalline form at a low temperature. The crystals, however, appeared to liquefy at a temperature above zero. He also referred to the recent discoveries concerning the heat and light giving properties of radium.

Stockport Chemists' Association.

A MEETING of this Association was held on April 1, at the County Restaurant, Mr. Wm. Dodge in the chair. The minutes of the last meeting were read and confirmed, which included the resolution, "That all qualified chemists in the town be invited to attend the meetings and become members."

Mr. Buckley proposed, and Mr. Anfield seconded, a resolution to the effect that the Chemists' Defence Association is worthy of every chemist's support. The resolution was carried unanimously.

A discussion followed on the sale of medicated wines, &c., and on other trade items.

Edinburgh Chemists', Assistants', and Apprentices' Association.

A MEETING was held at 36 York Place, Edinburgh, on Wednesday, March 25, at 9.15 P.M., Mr. J. W. Plenderleith (President) in the chair, when a paper was read on the

ETHER-SOLUBILITY OF CITRIC AND TARTARIC ACIDS.

By Joseph Tait.

The following solubilities for citric acid and tartaric acid in ether have been recorded:—

	Citrie Acid	Tartaric Acid
Lippmann United States Pharma-	1 in 11	_
copœia Bourgoin	1 in 18 1 in 44	1 in 250 1 in 250
Roscoe and Schorlemmer Danish Pharmacopæia	Tolerably easily 1 in 50	1 in 250
German Pharmacopæia Italian Pharmacopæia Japanese Pharmacopæia	1 in 50 1 in 50 1 in 50	1 in 50 — Insoluble
Swiss Pharmacopæia Hager	1 in 50 1 in 50	Almost insoluble Insoluble
Squire British Pharmacopæia Sadtler and Trimble	1 in 50 Slightly soluble Slightly soluble	1 in 40 ————————————————————————————————————

Attfield, Perkin and Kipping, Watts, and Wurtz say they are insoluble.

It is not clearly stated in these eases what is meant by "ether," nor is a temperature always given. The presence of water o_r

alcohol would make a very decided difference in the solubility, The author employed citric acid and tartaric acid of ascertained purity, and as solvents (1) commercial ether, (2) absolute ether made from methylated spirit, and (3) absolute ether made from pure ethylic alcohol. The acids in fine powder were macerated in each of these for some days at 15° C, with frequent agitation. The amount of acid dissolved by a given weight of solvent was estimated gravimetrically, and confirmed by titration with sedium hydroxide, with the following results:—

	Sp. Gr. at 15° C.	Citric Acid	Tartarie
Commercial ether Absolute ether from	0.737	1 in 5	1 in 20
methylated spirit Absolute ether from	0.719	1 in 30	1 in 118
pure ethyl alcohol	0.721	1 in 40	1 in 196

In each case three determinations were made, and the figures given are the mean. The nearest whole number is given, and it is believed that the results are a near approximation to strict accuracy.

The reading of the paper was followed by discussion, taken part in by Messrs. Garrow, Hill, Plenderleith, Rowland, and Schater.

Mr. RUTHERFORD HILL then described an interesting collection of drugs sent by Mr. Peter MacEwan, F.C.S. They comprised specimens from Mincing Lane drug-sales and examples of the sale-lists.

Thereafter followed an instructive

TALK ABOUT ORIGINS,

introduced by Mr. Hill, who explained that hunting up the origin of anything is not only interesting, but supplies one with such an association of ideas as to be a most powerful aid to memory. He illustrated his subject chiefly by reference to the origin of words—such, for example, as ipecacuanha, from the Peruvian words ipé, a root, and Cacuanha, the name of a district in which the plant grows abundantly; and sarsaparilla, from the Spanish zarza, a bramble, and parilla, a vine, in allusion to the appearance and habit of the plant. Tracing the origin of the chemical formula—KClO₃, for example—one is carried back along the line of history to the very genesis of chemical knowledge, and is able to realise the gradual dawn of the full light of present-day knowledge. The topic proved extremely interesting, and several members took part in the talk, which, owing to the lateness of the hour, had to be cut short.

Messrs. McEwan and Ferrier were elected auditors.

Wolverhampton Chemists' Association.

A MEETING of this Association was held on April 1 at the Star and Garter Hotel. Mr. F. A. Willcock presided over a very well attended meeting, which included Messrs, G. E. Perry (Birmingham), Gerrard (Birmingham), S. Phillips, F. J. Gibson, H. E. Cullwick, H. Collman, Forster, Warner, Godsell, Lowe, Sloan, Fellows, and Weaver.

A COUNCILLOR ON THE BILL AND POISONS.

Mr. W. G. Cross (Shrewsbury) delivered an address on "Pharmaceutical Topics," in which he gave an able synopsis of the Pharmacy Bill. The Bill is not, in the speaker's opinion, a perfect one. It does not embrace all that chemists have a right to elaim, but it is just, and, if passed into law, will to a great extent rectify the relations which at present exist between the public and chemists. Mr. Cross then referred to the report of the Poisons Committee, and said that any impartial person reading the evidence must feel a real surprise at the majority report. No doubt it was an oft-repeated and apparently genuine though really a fancied grievance which misled some of the members who signed it. When the additional evidence, which the Society will at the proper time supply, comes before Parliament they will be as anxious as chemists are that any future legislation shall be founded on Mr. Hills's excellent minority report. He (the speaker) thought the Council were wise in launching the Pharmacy Bill as a private

measure. It will stimulate the Government to action when it is demonstrated to them that a large force of opinion of every shade of politics in Great Britain views this legislative project of the Pharmaceutical Society with favour. When it is explained that the Society are not fighting for a monopoly, but for the protection of the public, the measure will not lack the sympathy of those whose duty it is to serve the public. A discussion took place, in which Messrs, Perry, Gerrard, Gibson, Coleman, and Willcock took part. On Mr. H. E. CULLWICK's proposition, a vote of thanks was passed to Mr. Cross for his interesting paper.

Poor-law Dispensers' Association.

A MEEEING was held at Surrey House, Victoria Embankment, W.C., on Friday, April 3. There was a good attendance of members, Mr. Montagu G. Smith (Lewisham Infirmary), President, in the chair.

The HON. SECRETARY (Mr. H. D. Kelf, Southwark Infirmary) read the minutes of the previous meeting, and a brief report of the committee's work. He mentioned that the number of new members was gradually increasing. Several names had been added to the locum-tenens register, and it was hoped that members will make full use of it during the holiday season or in cases of emergency. Mr. Kelf then read a short paper, entitled "Notes of Interest to Poor law Dispensers." The following questions were, amongst others, briefly discussed, which affect the dispenser, in common with other officers of the service: The Proposed Central Superannuation Fund, Defence Funds, Conditions of Poor-law service, the Paddington Guardians' proposal to stop pay in sickness. A useful discussion followed.

Liverpool Chemists' Association.

A MEETING was held at the Royal Institution on Thursday evening, April 2, Mr. R. C. Cowley (President) in the chair.

NEW MEMBERS.

'The following gentlemen were duly elected members: Messrs. Cleave, Frank Chabot, D. H. Evans, W. H. Nall, H. H. Jones, H. Heathcote, R. Manchler, G. R. Jones, F. F. Rowe, Lloyd Jones, A. H. Lodge, L. Prebble, D. Plevin, H. J. Palmer, J. Tirebuck, V. Strawson, — Shaw, H. C. Thompson, and R. Smith. Mr. CLARKE, who proposed all these, was highly complimented on securing such a large accession of members. Mr. F. H. Wall was also elected a member. On the proposition of Mr. T. H. WARDLEWORTH, in the absence of Mr. Prosper H. Marsden, Mr. Anton Altan, of Bucharest, one of the editors of the Buletinul Farmaceutic, was elected a corresponding member of the Society.

MISCELLANEOUS.

Mr. H. WYATT, jun., gave a demonstration of the Compresseur Dosseur Lenglen, and showed how it is possible to compress the substances for placing in cachets into convenient-sized pellets. The apparatus is exceedingly simple, and gives good results. Mr. Wyatt intimated that he would be glad to give any member full particulars upon application.

Dr. SYMES intimated that at the last moment he had

decided to stand for the Council this year. Dr. Symes, in the course of his remarks, stated that several would-be candidates this year had been disqualified because their nominators had overlooked the fact that they had not paid their subscriptions for the present year.

Mr. WARDLEWORTH read a letter from Mr. W. L. Currie, of Glasgow, and referred to his candidature. The many friends of Mr. Currie at the meeting intimated their inten-

tion of supporting him.

Mr. R. C. Cowley then introduced a discussion on the

REPORT OF THE POISONS COMMITTEE.

He said he was under the impression that it would be far better to take the working of the Pharmacy Act out of the hands of the Pharmaceutical Society, as it was impossible for an institution of this kind to deal in a fair way with all classes of traders, when they had to take action against those who were members of the Society and also those who were not. It was necessary for the Society to cleanse their own stable before dealing with other parties. He was quite

convinced that if the working of this Act had been placed in the hands of others it would have been worked with very much greater satisfaction. In reference to the conveyance of arsenic and other virile articles, the Pharmaceutical Society should not be blamed. He did not believe that there was such an increase in the use of poisons in the horticultural and agricultural trades as to warrant the report of the Poisons Committee. As to the question of the better qualification of horticulturists to advise upon matters affecting plant-disease, he was strongly of opinion that the chemist with his botanical training was a very much better judge in such a case, and, therefore, the plea urged by the witnesses on behalf of the horticulturist was very weak. In view of the fact that the Medical Council has put its foot down upon the employment of unqualified assistants, it seemed a very retrograde step to allow ordinary traders like ironmongers and seedsmen to vend powerful poisons in the way that was proposed. He paid a very high tribute to Mr. Hills's minority report.

Mr. T. F. ABRAHAM was under the impression that the cry of the convenience of the public might be pushed too far. It was claimed that thousands of persons must be kept at work and deprived of a day of rest in order to provide people with tobacco on Sunday, and post-offices must be kept open for certain hours on a Sunday to sell stamps to those who do not get them on a Saturday, and now it was claimed that in some out-of-the-way village where there was no chemist a shepherd who wanted arsenic was to be provided with it by the local ironmonger or seedsman, at the risk of endangering his neighbours' lives. He considered the Committee's proposals were reckless. As to the question of price, he was convinced that wholesome competition was the thing that would keep the price down. It was a matter which ought to be brought before members of Parliament very forcibly.

Dr. SYMES also spoke, and in the course of his remarks said he could not quite agree with the President's suggestion that the prosecutions under the Pharmacy Act should be taken over by an independent authority. If such an authority were appointed it would have to employ a number of public inspectors, who would have to do the work, and they would simply be inspired by the desire to get a share of the fines, and the pharmacist would find them much more troublesome than they would be of benefit to pharmacy.

Mr. WARDLEWORTH said that he had been requested by Mr. J. J Evans (Evans Sons Lescher & Webb, Limited)who regretted very much that he could not attend that meeting-to state that he, in conjunction with the leading wholesale houses, had placed their services at the disposal of the Pharmaceutical Society in order to give evidence in favour of the retailer in connection with the Poisons Committee Report.* Mr. J. J. Evans regretted that this offer had not been taken advantage of in view of the fact that it had been stated that the wholesale trade had not taken any interest in the subject. The very reverse was the case. Mr. Wardleworth also stated that Mr. Edward Evans, jun., had devoted considerable attention to the political side of the question, which he was very anxious to help forward. If the wholesale houses had been permitted to give evidence, they would have been only too pleased to do so to the best of their ability in favour of the retail trade.

The President stated he considered such a want of appreciation on the part of the Pharmaceutical Society was very much to be regretted, as he believed that such evidence would have been exceedingly useful and have had great

Dr. SYMES stated that he did not think such an offer could have been accepted, as the Pharmaceutical Society had no power to call witnesses; that was in the province of the Privy Council.

Mr. R. STOCKDALE said that there was a feeling among a good many chemists that it would be better to let the recommendations of the Poisons Committee be carried into effect, and it would soon result in chemists having more privileges than before, as the effect upon the public would be very soon manifest. So far as his own experience went, and it was rather a wide one, among the farmers of Yorkshire, he was convinced that very little arsenic was bought

^{*} See C. & D, March 7, page 401. The offer was made in December, 1901.

for sheep-dressing and work of that kind. An enormous quantity of sheep-dips was sold by agents in the different districts.

Mr. H. WYATT, jun., considered the ease made out by the promoters of the Poisons Committee report was exceedingly poor. If every chemist would bring the matter before his member of Parliament there would be nothing to fear, as the injustice was very obvious.

Mr. J. McCaig said the evidence given by the Pharmaceutical Society's witnesses showed sad want of preparation. They were frequently at a loss for an answer to questions concerning points upon which they ought to have been fully posted. He emphasised the want of thorough provincial pharmaceutical organisation.

Mr. W. Wellings thought that a meeting of the whole of the trade of Liverpool should be convened, so that there might be an opportunity of awakening the registered men to a sense of the danger the Committee's recommendations threatened them with.

The PRESIDENT agreed with Mr. McCaig as to the weakness of the Society's witnesses and to the need of pharmaceutical organisation. The Society was greatly to blame that it did not invite the co-operation of such Associations as theirs instead of attempting to get at the members of the trade through the uncertain and antiquated means of the Local or Divisional Secretaries.

Mr. H. WYATT, jun., said the Society are right in not inviting the Liverpool Chemists' Association, as its membership is not confined to men on the register.

Mr. T. F. ABRAHAM assured Mr. Wyatt that he was quite wrong. Theirs was a Pharmaceutical Association from the beginning, and although it now admitted as members individuals who are not qualified, the great majority of their members are engaged in pharmacy.

After a considerable and lively discussion, in which most members joined, the following resolution, proposed by Mr. T. F. ABRAHAM, and seconded by Mr. J. McCaic, was put to the meeting and unanimously passed —

This meeting is desirous of recording its strong disapproval of the report of the Poisons Committee and its approval of Mr. Hills's report, and offers its assistance to the Pharmaceutical Society in case necessity should arise.

In consequence of the lateness of the hour, a paper on the Legal Position of Pharmacy in Roumania," by Mr. Anton Altan, of Bucharest (translated by Mr. P. H. Marsden), was deferred to the next meeting.

Great Yarmouth Pharmaceutical Association.

THE annual meeting was held at 156 King Street, on Thursday last, April 2, at 8 P.M. Mr. W. S. Poll presided over a full attendance of members.

Several letters were read by the SECRETARY dealing with the Council-election, the Poisons Committee report, &c. With regard to the latter it was decided to write to the district members at once; the other matters were left to be dealt with at the next meeting.

The Secretary next read his fourth annual report, and was able to congratulate the members on the continued success of the Association. They had held nine meetings during the past year, which had all been well attended, and at which several important questions had been discussed. The annual outing in June, though lacking in numbers, was favoured by fine weather and was most enjoyable. The annual dinner held last month had been a great success. As Treasurer he reported a comfortable balance in hand. The reports were unanimously adopted. Mr. W. Sheppard Poll was re-elected President, Mr. H. Palmer Hon. Secretary and Treasurer, and Messrs. Shearman, Male, and Roberts members of the committee. A vote of thanks to the officers for their services during the past year was heartily accorded.

Peterborough Chemists' Association.

AT a meeting held at the Bedford Hotel, Peterborough, under the presidency of Mr. J., Pearson, it was resolved to re-form the old Peterborough Chemists' Association, under the title of the Peterborough and District Chemists' Asso-

ciation. Mr. J. E. Saunders was appointed Hon. Secretary (pro tem.), and the following gentlemen constituted a committee: Messrs. J. Sturton, Calcutt, F. Whitwell, C. Bayley, F. Oldham, and H. E. Noble.

Burnley Chemists' Association.

THE annual meeting was held on Thursday, April 2. There were present Mr. J. A. Heaton (President), in the chair, Mr. Dodsley (Treasurer), Mr. Brown (Secretary), and Messre. Coates, Clarkson, Barlow, Lawton (Nelson), Butterwerth, Tomlinson, Hurst (Colne), Hitchon (Padiham), Hartley (Nelson), and Catton.

ANNUAL REPORTS.

Mr. Brown (the Secretary) gave a review of the proceedings since the last annual meeting, and Mr. Dödsley (Treasurer) reported a balance in hand of 31, 14s. 7d. This would have been considerably reduced had it not been that the President (Mr. Heaton) refused to take his expenses for attending the British Pharmaceutical Conference. On the motion of Mr. Coates, seconded by Mr. Hurst, the reports were adopted.

The PRESIDENT expressed his gratification at the fact that the Association appeared to be entering upon a period of renewed life and activity. Certainly they, as chemists, were living in stirring times. The Pharmacy Bill had been backed pretty strongly in Parliament, but it behoved them to put all the pressure they could on the local members to secure its adoption. Equally important was the threatened legislation on poisons. Mr. Heaton warmly commended the P.A.T.A.; and said he was looking to it to be of substantial benefit to chemists in their business.

ELECTION OF OFFICERS.

Mr. Heaton was strongly urged to accept the presidency for another term, and he was unanimously re-elected. Mr. Barlow was elected Vice-President. Mr. Brown asked to be relieved of the secretaryship, but was induced to accept it for another year. Mr. Dodsley was reappointed Treasurer, and the committee were re-elected with additions. Hearty thanks were accorded to the officers for their past services. Mr. Barlow was added to the Parliamentary Committee.

A discussion followed on the best means of making

THE P.A.T.A.

thoroughly effective in the district, and it was arranged to call the P.A.T.A. committee together this week.

POISONS AND THE PHARMACY BILL.

The SECRETARY submitted communications from the Federation, and after some discussion it was decided, on the motion of Mr. Barlow, to write to Mr. Mitchell, M.P. for Burnley, and Mr. Shackleton, M.P. for the Clitheroe Division. The members then discussed the subscription to the Pharmaceutical Society, and resolved to bring the matter under the notice of the Federation.

Bournemouth Pharmaceutical Association,

A WELL-ATTENDED meeting of the above Association was held at the Albert Restaurant on April 2, under the chairmanship of Mr. Worth (President).

TRADE MATTERS.

A long discussion took place on the present state of the craft and the various remedies suggested for combating the unsatisfactory state of affairs. The Pharmacy Bill and Poisons Committee report occupied the greater part of the discussion, and a vast divergence of opinion was manifest, but it was felt that, as an Association, everything possible ought to be done to strengthen the hands of the parent Society in their endeavour to pass the proposed Bill through Parliament. A resolution to this effect was carried unanimously. The discussion of the Poisons Committee report shows very clearly that the members of the Association are unanimously of opinion that it is necessary to strenuously oppose, from a public point of view, any alteration of the existing law, especially the addition of a third part to the schedule. A resolution that the Association take all-avail-

able means to support the minority report was carried unanimously, and the President and Secretary of the Association are to interview the local members of Parliament.

It was decided that a whole day's outing should be arranged, and that ladies be invited to be present. The second Wednesday in June was suggested as a convenient day. The matter was left in the hands of Messrs. Williams, Bilson, and Rose to complete the arrangements.

Bradford Chemists' Association.

THE sixth annual dinner of this Association was held on Tuesday evening, April 7, at the Royal Hotel, Bradford. The President (Mr. J. A. Mitchell) occupied the chair, and was supported by the Mayor of Bradford (Alderman David Wade), the ex-Mayor (Mr. W. C. Lupton), the President of the Pharmaceutical Society (Mr. Newsholme), Mr. W. Gowen Cross (Shrewsbury), Mr. W. L. Currie (President of the Federation of Pharmaceutical Association-), and about fifty of the chemists of Bradford and other towns in the West Riding of Yorkshire. The loyal toasts having been honoured, Mr. A. H. Waddington proposed the teast of

THE PHARMACEUTICAL SOCIETY.

Mr. NEWSHOLME, in the course of his reply, said he could not pretend to forecast what might happen to the Pharmacy Bill, but the reason why the Bill had been introduced into the House of Commons was that by its means attention might be drawn to the anomalies under which the chemists or the country suffered, and that, at least, the way might be aved for legislation next year. It was hoped that when the time for legislation to be proposed by the Privy Council came these Bills might be put together, and reterred to a Grand Committee or a Select Committee, and then the whole question of the present position of pharmacy would be brought up, and evidence would be asked for, and out of that might come a Bill which might not only be to the advantage of the public, but also to the advantage of the pharmacist. As to the report of the Poisons Committee, it was evident that it had no relationship to the evidence which had been brought before the Committee, for the whole of the report might just as well have been made before the Committee sat, and before the cyidence had been heard, and it had been a waste of money to bring people from all parts of the country to give that evidence. Mr. Newsholme also alluded to the remarks by Mr. Waddingt in on the division of the Minor examination, and to examination-matters generally, as well as the duties of divisional secretaries. Speaking of the scarcity of apprentices, he said he considered this merely a passing difficulty. Other toasts were "The City and Trade of Bradford," proposed by Mr. WORFOLK (Ilkley), responded to by Mr. Councillor W. C. LUPTON; "The Bradford and District Chemists' Association," proposed by Mr. W. Gowen Cross, responded to by Mr. D. S. Priestley (Secretary); "Kindred Associations," proposed by Mr. B. Rogerson, responded to by Mr. W. L. Currie (Glasgow); and "The Visitors," proposed by Mr. J. T. METCALFE. responded to by Mr. W. POLLARD (Wakefield). The speeches were interspersed with songs, provided by Messrs John Walker, C. S. Fletcher, Sol. Taylor, A. T. Bailes, W. L. Currie, and H. G. Dutton, with Mr. Arthur Hanson at the piano.

Dewsbury Chemists' Association.

MR. R. GLEDHILL (President) presided over a month'y meeting of this Association on April 6.

FEDERATION LETTERS.

A letter was read from the Secretary of the Federation of Local Associations calling attention to the Council-election, and asking the Association to consider the matter, with a view to selecting for support the men best qualified for the work. A letter was also read from the Federation with reference to the Poison Committee's report, suggesting that local members of Parliament should be seen on this matter. It was decided that the Divisional Secretaries should endeavour to arrange interviews with Mr. Runciman, M.P. for Dewsbury, Mr. Hutton, M.P. for Morley, and Mr. Whittaker, M.P. for Spen Valley, to discuss the Poisons report and the draft Pharmacy Bill.

The SECRETARY reported that Mr. Runciman had been written to on the Pharmacy Bill, and he had replied stating that he was maintaining an open mind on the question. When the Government introduced such legislation as the Prime Minister had led them to expect, he would take no action without a vaiting the opinion of the Dewsbury Association.

COUNCIL-ELECTION.

Mr. R. C. Walshaw, of Huddersfield, a candidate for a seat on the Council, attended the meeting and gave an

address on pharmaceutical politics.

Asked what his attitude was on the titles question, Mr. Walshaw said he thought they had power under the present Act to prevent the misuse of the titles. The Council, after investigations had been made by a sub-committee, had decided that nothing could be done by a test-case. He thought they must have some information not at the command of chemists generally for coming to that decision. He would prefer not to bind himself to support a test-case until he knew why the Council had come to the conclusion mentioned. The new Pharmacy Bill was badly drafted. Clanses 7 and 11 nullified each other, but the latter clause was intended to protect the titles.

Mr. BROADHEAD contended that, under Clause 7, companies would be allowed to use the titles if one director was qualified. If the Bill were passed, they would simply be in

the same position as under the 1863 Act.

Mr. PICKARD argued that, just as all individual chemists were compelled to pass the examination and qualify, all

directors of companies ought to be qualified.

In reply to further questions, Mr. WALSHAW said he was in favour of legislation on the lines of the new Bill, but he would like to see some alterations. As to his candidature, he explained that he was under the impression that at least one of the retiring members of the Council would not seek re-election. Had he known they were all going to be nomi-

nated he would not have stood.

Mr. BROADHEAD said he thought Mr. Walshaw's candidature could be justified. If the new Bill of fifteen clauses of elaborate mongrelism was the best that could be produced by the combined wisdom of twenty-one full-grown men with round heads and flat feet, then it was time they had some more candidates. His candidature could also be justified because the business of the Council had not lately been condueted in an honest and straightforward manner. All the trade journals were tied down to a class. Pharmacy thirtyfive years ago was fit to go into, but it was not now, and thirty-five years hence it would be worse. Only their own individual efforts had kept them from the workhouse. This new Bill was only intended to make hewers of wood and drawers of water for high-class as distinct from commercial pharmacy. The old Bill was described as the wretched Poisons Bill; this Bill was a contemptible Companies Bill.

After further discussion, a resolution was adopted, on the motion of Mr. STEAD, seconded by Mr. GUTTERIDGE, thanking Mr. Walshaw for his address, and approving of his candida-

ture. Mr. Walshaw briefly replied.

Messrs. G Walker and S. N. Pickard were appointed delegates to the next meeting of the West Riding Federa-

Exeter Association of Chemists and Druggists.

A JOINT-MEETING of the Exeter Association of Chemists and Druggists and the Exeter Grocers' Association was held on April 7, at the City Guildhall, to discuss the question of

THE SALE OF PATENT MEDICINES,

particularly in connection with the P.A.T.A. Lemmon presided over a representative attendance.

Mr. P. F. ROWSELL, a member of the Executive of the P.A.T.A., explained the steps which were taken by the Association to prevent extreme cutting in the sale of patent medicines through the initiative of Mr. Glyn-Jones. The speaker estimated that there are about 500 articles protected, and if anyone's name was put on the stop-list he would not be supplied with any of the articles on the list. A man could not afford to ignore the list. Some of the biggest cutters in this country have tried to cut the P.A.T.A. articles, and some have come

round because they have not been able to obtain supplies. The different chemists' associations throughout the country are writing to various proprietors who have not yet protected their articles, and the Exeter Association, in discussing the matter, thought it would be well if they could call the grocers and the representatives of the different stores in the city together, that, instead of the chemists writing alone to those proprietors, it would have greater weight if the body dealers in their patent and proprietary articles in the city

Mr. SAWDYE (a grocer) said he did not do very much in patent medicines, and he did not care if he did anything at all, but he was willing to join in the movement. If each trader was supplied with the list from time to time it would simplify matters very much. A person might now be excused if he unintentionally sold below the price because he did not know the facts.

The CHAIRMAN said that had been a point overlooked by the Association. Attention was called to it at the last meeting of the Exeter Association, and this meeting was really the outcome of it. He took it that there was but one feeling amongst all who sold patent medicines, that they all wanted to get a reasonable profit, and that they all realised it was no use trying to get an unreasonable profit in these times. What they wanted to get as far as possible was a system of uniform prices adopted.

Mr. Mole, on behalf of the Grocers' Association, moved a resolution heartily supporting the recommendation to write to all proprietors whose articles were not on the P.A.T.A. list. He thought grocers would only be too glad to help in any effort to put all things they possibly could on the list.

Mr. MATTHEWS (grocer) seconded the resolution, which

was carried unanimously.

A discussion then took place as to what proprietors should be written to. Mr. KING (Secretary of the Grocers' Association) said some proprietary articles were discussed by his Association, but they could not touch them, and they decided that the prices must remain, but no doubt if they were put on the P.A.T.A. list things would be altered.

Mr. H. W. GADD (Hon. Secretary of the Chemists' Association) stated that before the large meeting of chemists held in London in November last, the P.A.T.A. communicated with fifty-four proprietors whose articles were not on the list. A good many acknowledged the letter, but very little had come of it, though one or two had since, he believed, placed their articles on the list. Still, that list would form the basis of the list of manufacturers to whom the joint Associations could now write.

Mr. Rowsell said there was no doubt, from what he heard at the last meeting of the P.A.T.A. in London, that a large number of the American proprietors were on the point of doing something. He had a communication that day with regard to one of those American articles, which no doubt would be put on before very long. They only wanted a few more hundred letters from all parts of the country, and along they would come.

It was resolved that the preparation of a list of proprietors who should be communicated with be left to the Hon. Secretaries of the two Associations and submitted for

final approval.

Mr. MILTON said he should like to see some definite action taken so that all vendors of proprietary articles and patent medicines should be kept informed of any addition to the P.A.T.A. list.

Mr. KING undertook to bring the matter before his Association with the view to members either j ining the P.A.T.A. or subscribing for their journal. Several grocers signed their names as intending subscribers.

THE PHARMACY BILL.

Mr. H. WIPPELL GADD (Hon. Secretary), on behalf of the Exeter Association of Chemists and Druggists, has this week sent the following letter to the representatives of Devonshire in Parliament:-

97-100 Fore Street, Exeter, April 7, 1903. DEAR SIR, -On behalf of the members of the above Association, I beg to draw your attention to the Pharmacy Bill which was introduced into the House of Commons the 26th ult. by Mr. Thomas Lough. The object of this Bill is to remove defects which have been found to exist in the Pharmacy Act of 1868. By that Act it was enacted, firstly, that only persons qualified by examination as chemists and druggists or pharmaceutical chemists may (a) sell poisons, (b) keep open shops for the sale of poisons, (c) take the title of chemist and druggist or pharmaceutical to themset; secondly, that such qualified persons must (a) conform to the regulations provided by the aforesaid Act for the storing and selling of poisons, (b) compound medicines according to the Pharmacopæia.

By a decision of the House of Lords it has been decided that the foregoing sections do not apply to limited liability companies, the result being that seven unqualified persons can legally do collectively what no one of them can do as an individual. only way of enforcing the Act against limited companies is by taking civil proceedings against the assistant actually performing the sale. In many cases where this has been done, the assistant's plea has been that he, the seller, has no means, and consequently no penalty has been recovered, and the law has continued to be broken with impunity.

The present Bill seeks to make the employer (whether an individual or a company) liable for the penalty, and to prevent poisons being sold and dispensed at branch-shops by unqualified assistants, whether such shops are owned by individuals or companies. From this brief summary of the Bill, a copy of which I enclose, we think you will agree that it is a measure which should, in the interests of the community, be passed into law, and we

trust you will lend your valuable support to this end.

Another matter to which we desire to call your attention is the report of the Departmental Committee appointed by the Privy Council to cousider whether any alterations shall be made in the coulier to consider whether any anteraction shall be made a schedule of poisons attached to the Pharmacy Act, 1863. This report recommends that a third part be added to the schedule allowing certain highly potent substances used in agriculture and horticulture to be sold by dealers other than chemists and druggists or pharmaceutical chemists. The Prime Minister has stated, in reply to a question in the House of Commons, "That this report is under consideration with a view to legislation at the earliest opportunity." You will therefore see that on the one hand it is proposed to extend the original Pharmacy Act, and on the other to nullify ts fundamental provisions. We would especially call your attention to the evidence given before the Committee by Dr. Wynn Westcott, the Coroner for North-east London. "He stated that he approved of the present restrictions, and he was authorised to say by the Coroners' Society that, in their opinion, the restrictions should be increased rather than diminished. In regard to scheduling poisons, no more striking argument could be put forward than the case of carbolic acid. The average number of deaths in his district for six and a half years prior to carbolic acid being scheduled, was six per year. Since it was scheduled, the deaths from carbolic acid had been two in eighteen months. He was certainly of opinion that no poisonous substances or preparations should ever be, juder any circumstances, sold to anyone but by a chemist. That opiniou was the result of his experience. A chemist would sell a parcel he knew to contain poisons with much poisons, even if properly labelled, there was a greater risk in a grocer's shop than in a chemist's. He had every reason to believe that chemists and druggists carried out the regulations imposed by the Physics and the property of small quantities of most of the property of the property of small quantities of the property of the property of small quantities of the property of the property of small quantities of the property of the property of small quantities of the property of the property of small quantities of the property of the pro by the Pharmacy Acts. In the event of small quantities of weed-killers and insecticides being required by a farmer or horticul-turist, he supposed that the local chemist would be able to supply

The only argument in favour of the report is the allegation that it is difficult for farmers and horticulturists to obtain the poisonous compounds that they need for their work. Little evidence has been brought in support of this, and the fact that there are over ten thousand chemists in business in Great Britain shows that no real hardship is likely to be caused.

We shall be glad if you will grant an interview to a deputation from our Association, at some time and place convenient to yourself, to discuss this matter more fully before May 11, the date on which the Bill is down for second the reading. We could then show you concrete examples of the careless way in which deadly poisons are being offered to the public by unqualified vendors.

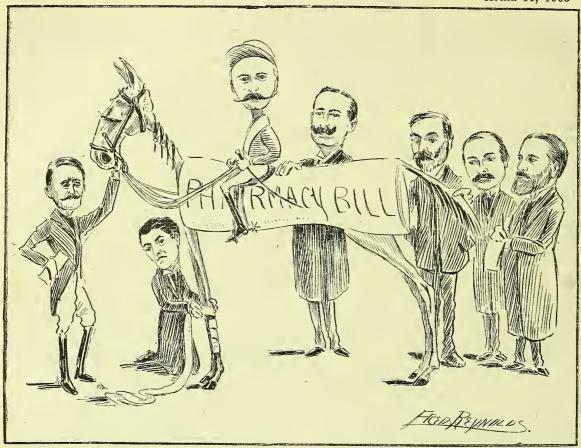
Apologising for troubling you at some length, and trusting you will give your attention to this matter of urgent public importance,

I have the honour to remain,

Your obedient servant,

H. WIPPELL GADD.

CARDAMOM-GROWERS MEET .- A meeting of the committee of cardamom-growers took place in Kandy on March 13. A lengthy discussion took place regarding the best means for pushing the trade with a cess at 50c. per acre, estimated to amount to 2,000r., of which 500r. is already in hand. It was finally decide to inquire into the state of the markets, when the committee could resolve how best to push trade. It was also resolved that Mr. Spence should be provided with an accredited letter from the Ceylon Government, so that he might acquire direct information from Customs officials in Australia about the trade in cardamons in the Commonwealth, whither he proceeds shortly.



WE understand the favourite for the House of Commons Stakes is Mr. William Samuel's Farmasybyl, by Newsholme—Sandford, 35 yrs, 5 st. 3 lbs.

Lough Up.

Now, this is a race,
That will whiten the face,
And give to Camlachie a shock;
Though, of course we feel "rocky"
To see our good jockey
On such an unpromising crock.

But we're brimming with faith,
And no goblin or wraith
Can e'er deaden the hopes that we feel;
When our only M.P.
At the bridle we see
With Henniker-Heaton at heel.

Our feelings it churns
E'en to look at John Burns
And Tomkinson, member for Crewe,
And Wanklyn the fierce,
Who'll the arguments pierce
Of the bold Ballikinrain Cuckoo.

Steed swift as a dart!
And all ready to start,
And has round him the best of good backers.
He doesn't look much
(You may look but not touch!),
But he'll knock out the weed-killer packers.

In wind and in limb
He is sound; and on him
There is betting 'mongst all the pill-makers;
And the odds they display
(Rather long did you say?)
Are 500 to 1; any takers?

Synopsis of the Bill.

We have been asked to reprint the analysis of the provisions of the Bill which we published on March 28, and can supply a limited number of copies to those who wish to write to their members of Parliament.

The Medical View.

The Lancet looks with favour upon the Bill. Referring to its contents and introduction last week, our contemporary says: "The objects of the Bill are good, and may be shortly summarised as tending to check the abuses which are at present connected with the sale of poisons." The Lancet does not, however, consider the Bill perfect. It remarks:

We do not see, however, in this Bill as drafted any clause whereby the rights of medical men to dispense their own medicines, either themselves or through the agency of a qualified dispenser, are to be preserved, and one should certainly be added. Moreover, we think that the provisions of the Pharmacy and Sale of Poisons Acts should no longer be able to be evaded, as they are now in the case of chlorodyne, by the simple method of placing a $1\frac{1}{2}d$. Government stamp on the bottle. But we have every wish to place the sale of poisons under strict control, and cordially agree with the authors of the Bill that companies should be brought within the provisions of the law.

The Lancet should refer to its files of ten years ago, when Pharmaceutical Society v. Piper (QB.) decided that about proprietary medicines containing poison.

The Poor Grocer.

The Pharmaceutical Society is not taking this action with a view to increasing the trade of the chemist—nothing is farther from its thoughts; its sole object is to safeguard the public... Now that the subject is once more under discussion, the grocer ought to make an effort to win back what he used to regard as a kind of birtbright—the sale of disinfectants. It is certain that by keeping in its own bands the sale of poisons the Pharmaceutical Society has not effected a decrease in the number of sucides by means of carbolic acid. Common sense rebels against such inconsistency as prohibiting the free sale of anything which makes for health in the homes of the poor, on the plea of "regard for the public safety," while allowing rope and revolver to be freely purchased by any wishing to make a hurried exit from this vale of tears. But perhaps the P. S. has "up its sleeve" a Bill relating to the sale of these also!

This superlative wit is the *Grocer's* chief comment on the Bill. Our contemporary should really try to post itself-better

Observations and Reflections.

BY XRAYSER.

There are Millions Invested

in drug companies, says the Drug Companies' Association. The "millions" is the one argument advanced by these children of Mammon in support of their claim that they should enjoy a perpetual right to continue to defy the principles laid down in the Pharmacy Act. And they are wise in their generation. It is the millions which prevail nowadays. Parliament thinks in millions, and can hardly bring its machinery to deal with smaller denominations. It votes away fifty millions with its eyes shut, while an expense of five hundred pounds would excite a score of conomists into vigorous speeches. Can we not impress on members of Parliament that there are millions also invested in businesses owned and carried on by pharmacists who have fulfilled the law's requirements? And, more important still, that the latter class commands fifty votes to the Drug Companies' Association's one? That is the consideration that M.P.s realise rather readily.

Association of Ideas

is not always explainable. Why was it that, when I read about the "millions invested," my mind took a leap back 120 years to the little Swedish town of Köping, where Carl Wilhelm Scheele, pharmacist, was trying to make a living? Why should millions suggest Scheele? He never came within sight of a million halfpennies. He worked and saved for years before he could afford to build a proper laboratory for himself. But he did a few things for pharmacy and for science in his short lifetime-not, of course, to be compared with what the drug companies with their millions invested have done, and are doing; but things of some note, nevertheless. There has never been a second Scheele, but there have been, and still are, pharmacists on his model-men who scrve their profession and their fellow-men for something besides profit; who pay their way, and perhaps save a few hundreds. But how petty, how contemptible these poor little lives are to us who have had the fortune to reach the epoch of the "Millions"! Hosanna to the Capitalist! Be gentle and respectful to him, O Parliament!

The Restriction of the Sale of Poisons

to chemists, which was the legislative innovation of the Pharmacy Act of 1868, was largely the work of the Privy Courcil, which now seeks to undermine the legislation which it once so carefully fostered. The Select Committee of the House of Commons, to which in 1865 the Bills of the Pharmaceutical Society and of the United Society were referred, was greatly influenced by a report on the dispensing, vending, and keeping of poisons which Dr. Alfred Swaine Taylor had previously drawn up for the Privy Council, by the valuable evidence given by that experienced toxicologist to the Committee, and by the evidence of the Medical Officer of the Privy Council-Mr. (afterwards Sir) John Simon. Both of these authorities were clearly of opinion that if some slight inconvenience should result from the restriction this would be an advantage. In the course of Mr. Simon's examination by the Committee, Sir Fitzroy Kelly asked him if, in view of the accidents and murders resulting from the unrestrained sale of poisons, he advocated that they should be sold by examined chemists and druggists only. "Certainly I do, strongly," was Mr. Simon's answer; "legislation that would make the selling of poisons by village shop-keepers and grocers impossible." "Wholly?" "Decidedly."

"You think it should be so?" "Certainly." Then Sir John Shelley asked; "Does that last answer of yours go to articles employed in trade?" "Yes," said Mr. Simon; "I should make no distinction whatever." Chemists subsequently alienated Sir John Simon's sympathy by their foolish refusal to adopt regulations in 1870, and it is likely that Mr. Harrison has inherited this alienation.

The Medicine stamp Acts

are more scientifically constructed than many of us imagined. A correspondent directs my attention to a paragraph in this page a fortnight ago, in which it was stated that the case against the Leeds chemist turned entirely upon the meaning of the exemption in favour of chemists in respect to known and approved medicines. The writer says (and I fully agree with him) that the expression should have run, "in respect to recommending known and approved medicines." The distinction may seem a little fine, but there is this importance in it (as my correspondent points out) that the exempting provision regards the recommendation of such medicines, if sold by duly qualified persons, as the antithesis to the recommendation of nostrums by the proprietors, makers, compounders, original or first vendors thereof; and he suggests that my inexact remark ignores "the rational equilibrium of the statutory provisions as to exemption, which is so delicate that the centre of gravity is easily upset." Mr. Asquith did not present the case so neatly as that in any part of his fifty-guinea speech.

Homœopathic Chemists

are passing under a cloud at present. I learn this from an editorial article in the Homœopathic World for April, which states that in the month of January of this year three homœopathic chemists closed their doors. This circumstance is susceptible of several explanations. Perhaps those three chemists abandoned their businesses for sufficient reasons other than commercial ones; the London County Council or some new railway may have bought them out. More likely they found that the neighbouring catholic chemist absorbed such trade as there was to be done. Possibly the heresy itself is tottering. When the Liberal candidate at Chertsey was asked by a journalist to account for his defeat, he said the principal cause was that there were not enough Liberals in the division. An analogous reason may explain the closing of those pharmacies.

Very Curious

is the attitude of the medical journals towards homeopathy. A story is told in the Homeopathic World which exhibits an amount of principle or prejudice—I have no idea which—on the part of the Lancet and British Medical Journal, which it is equally difficult to credit or discredit them with. Dr. John H. Clarke has compiled a large "Dictionary of Materia Medica" with homeopathic tendencies, and one of his colleagues, Dr. R. T. Cooper, thought he would like to advertise it in the journals named. He asked for quotations through an agent. The British Medical Journal refused the advertisement on the spot; the Lancet took the money, 10%. 8s. for fifty-two insertions, gave a receipt for it, but afterwards returned the amount with an intimation that the advertisement was inadmissible. Now, these journals either honestly believe that the doctrines taught in the book are dangerous, and they refuse to jeopardise the orthodoxy of their readers, or they have reason to believe that they would lose more than the money involved because of the prejudice of their readers. The first reason would be a tribute to their sense of duty; the second to their worldly wisdom; but neither is compli mentary to the intelligence of the medical profession.

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East Indian Sandalwood.

A RECENT number of the *Indian Forester* contained three interesting contributions to the literature of the sandalwood-tree. The first is by Sir Dietrich Erandis, K.C.I.E., F.R.S.,

on "Treatment of the Sandal-tree," and is inspired by a paper by Mr. C. A. Barber, M.A., F.L.S., Government Botanist, Madras, which was published in the same journal in September, 1902. The second is a letter by Mr. P. M. Lushington, Deputy Conservator of Forests, and is headed "Percentage of Essential Oil in Sandalwood." The third and most valuable is an official report on "spike" disease in sandalwood-trees in Coorg, by Mr. Barber, who was requested by the Government to study the disease on the spot, and, if possible, determine the cause of it. As a result, Mr. Barber has been able to trace the disease to the roots, but the exact cause of the malady has not been ascertained. We carmot do better than give a description of what "spike" disease is according to Mr. McCarthy, the present Deputy Conservator of Forests in Coorg:—

The new shoots or leaves of a tree, instead of presenting the graceful appearance natural to the species, begin to grow stiff and straight; the leaves also stand up stiff and erect like bristles, and as their arrangement is opposite and alternate the shoot looks like a spike with four lines of erect leaves growing down it, something like a chimney-brush. There is no discernible change in the new axis, except that it grows out stiff and straight. As regards the leaves, in the first place, the distance between the alternate pairs is greatly decreased, then the petiole and blade are tip to tip in one straight line, and lastly the blade is shorter, narrower, and more pointed. However, there is no sign of spot or sickness in the leaf-substance. As the disease progresses the new leaves become still smaller, narrower, more pointed, and fewer each successive year, until the new snoots present the appearance of fine spikes bearing four rows of fine bristles. After this the tree rapidly dies off.

Spike appears to be of recent origin, having made itself felt during the last four or five years only, and during that time it has swept the sandalwood-trees from whole tracts, especially where, from artificial planting or other causes, the trees are near together. The steady progress from plant to plant, the complete destruction of all plants, excepting very young ones, in attacked areas, and the frequent immunity of isolated trees seem to point most decisively to the presence of a definite communicable disease, and not to peculiar phase of growth due to conditions of weather or soil. From certain facts it would appear to be contagious; but in some cases. Mr. Barber points out, it is difficult to see how the affected trees could have touched each other. The determination as to whether the disease is contagious is one of the problems Mr. Barber has yet to solve, and its clucidation would make it more easy to diagnose and prevent. From all accounts the progress of the disease is very rapid, and the transition from a luxuriant tree, with many healthy leaves upon it, to one shrivelled by disease may be merely a matter of months. A marked character of all the diseased trees which Mr. Barber has examined is the absence of any external appearance suggesting the presence of any parasite, animal or vegetable. At a distance the tree appears to be dead and leafless, resembling an Eaglish tree in winter. On closer inspection, however, there are found to be many leaves scattered over the tiee at the ends of the stiff branches, but they are very different from the normal healthy ones, exhibiting in an exaggerated manner the form of those already described. Microscopic examination has brought out some interesting facts. It has been found that all the tissues of the diseased branches, even to the smallest twigs, are loaded with starch. In healthy branches of small size, however, there is no starch at all. As fast as it is formed the carbohydrate is used up in the process of growth. For growth, besides the starch formed in the leaves, the plant has need of other substances—salts and water—which are contributed by the roots. In the diseased trees growth has ceased to a large extent, and they die with their tissues loaded with undigested food. This fact pointed very distinctly to the roots as the place where the trouble might be found, and it

was only after long search that Mr. Barber discovered there was something seriously wrong with the root ends. examination of the roots of spiked trees showed that their sucking organs, or "haustoria," are absent or dead. Mr. Barber thinks it probable that the disease is spread from plant to plant by means of the roots. Concluding, he remarks there is no doubt a grave disease has appeared among the sandalwood plantations and forests, and it will rest with those concerned whether they prosecute further the studies thus commenced. The Indian Government have many capable and intelligent Forest officers in their service, and it is to be hoped they will leave no stone unturned to combat the disease. Coorg is one of the most important sandalwood districts in India, and as the trees are the property of the Government it will be their duty to see that sandalwood must now be raised by sowing and planting on a large scale.

Sir D. Brandis's paper on the treatment of the sandaltree gives some interesting facts concerning its life history. It may not be generally known that the sandal-tree is a root-parasite—i.e., it has been ascertained by microscopic examination that its roots attach themselves to roots of other plants. Several of the latter, for which sandal has a special affinity, are mentioned by Sir Dietrich, who concludes that it is evident that the sandal-tree lives and thrives whilst its roots are in intimate connection with the roots of many other plants of different orders and having different structure and organisation. Foresters in Mysore and Coorg have long known by actual experience that the tree thrives well when growing in company with Casuarina and Lantanz. On the other hand, it flourishes also in hedges and among shrubs when neither of those plants are near. Sir Dietrich Brandis thinks that the sandal-tree takes up a large proportion of the mineral substances which it requires not directly from the soil but through its roothairs from the roots of those plants with which it lives. Sir Dietrich takes a philosophic view of spike disease, and points out that the spruce and pine forests of Germany continue to flourish in spite of the ravages of the Nun and of Gastropacha Pini. Mr. P. M. Lushington's paper on "The Percentage of Essential Oil in Sandalwood" is intended to prove that the richness of wood in oil is dependent rather on the clevation than on the nature of the soil—the higher the elevation the richer the wood in oil. Thus billets of wood from trees grown at an elevation of 900 feet to 1,200 feet yielded 0.24, 0.54, and 0.46 per cent. of essential oil, one from 2,500 feet gave 1.94 per cent., and another from 3,500 feet yielded 2.44 per cent. of essential oil.

Since the above was written, Dr. E. J. Butler, cryptogamic botanist to the Government of India, has also furnished a lengthy report on "spike." He is also unable to decide either the exact cause of the disease or the best method of checking it. Curing it there is evidently no hope of, once a tree is attacked. Dr. Butler is of opinion that death follows the first appearance of the disease much more rapidly than was at first supposed, declaring that we must reckon in months instead of years in estimating its progress. No case of recovery has yet been reported. The doctor says the disease is communicable, and shows marked similarities to "peach yellows." Treatment, since the cause of the disease is unknown, is a difficult matter, and must be chiefly directed to confining the disease to its present limits. The American fruit-growers have for over twenty years been investigating and fighting "peach yellows," which has ravaged the Eastern States, and its nature and the best means of preventing its spread are to-day as little known as in the beginning. The trees die of a sort of fatty degeneration. They begin suddenly to manufacture starch out of all proportion to

their needs, growth is forced, the tree gets no rest, and dies of exhaustion, the result of starch-poisoning.

As far as regards the market condition of sandalwood oil, it is curious that although vague and indefinite reports have been circulated in London in regard to a discase among the trees at Coorg, they have not had the slightest influence in bringing about better prices for the distiller, and keen competition continues to exist. One continental firm has made inroads on this market by doing business at prices which can only leave a bare profit, and this in spite of dearer prices paid at the last sandalwood-auctions.

Synthetic Scents.

DR. LIEBMANN pointed out in his lecture on perfumes at the Royal Institution recently, that the same principles of distillation with steam and extraction by enflewage have underlain for centuries the preparation of essential oils and perfumes from the fragrant products of nature. There may therefore be a taint of heredity in one's preference for the essences collected from field and forest, over the contents of the tar-bucket, however metamorphosed the latter may be by the chemist.

The East will always be a source, as it was the birthplace, of perfumes; but it is in the Western world that the most striking development in the industry has been taking place during the past few decades. On the continent of Europe particularly, the artificial or synthetical production of perfumes has been placed upon almost as firm and systematic footing as the manufacture of dyestuffs and synthetic remedies. Although Dr. Liebmann's statement that artificial otto of rose is an ordinary product of commerce must be taken with a large discount, there is no doubt that enormous quantities of some artificial perfumes are now produced, but the natural industry is not altogether in peril of extinction. One had not to go further than the lecturer's table for evidence of that. These synthetic scents were insignificant compared with the rich collection of natural perfumes exhibited by Messrs. Stafford Allen & Sons in the adjoining library. This old English firm thus demonstrated, we think unintentionally, that the industry of oil-distilling and perfumery is not only still alive in England, but is full of vigour, and in some respects absolutely unequalled. Despite all the efforts of modern science and of systematic synthesis, English oils of lavender and peppermint still command the highest prices and cannot be replaced, and it is undeniable that the Continent has still to draw very largely from England the finest ingredients for perfumery. The counterdemonstration had, therefore, the excellent effect of showing to the uninitiated the mistake of judging a whole industry by the results obtained through shining lights in the synthetic world.

To imitate intelligently the natural perfumes a systematic study of their composition has been necessary, and one of the greatest benefits conferred on the industry by scientific research has been the identification of the various components of essential oils, and the acquirement of knowledge as to their true relations and proportions, which have been invaluable in checking sophistication and adulteration Where it was impossible to mention all workers, Dr. Liebmann was right in giving the palm to Wallach and Baever for unravelling the confusion which the chemistry of essential oils presented twenty-five years ago. Others were mentioned who, like Tilden, prepared the way and found the ends of the threads. Nor can anyone deny that the names of Tiemann and of Semmler are rightly associated with the greatest achievements in the industrial application of the highest scientific knowledge to the production of artificial

perfumes. Vanillin and ionone, referred to as the two most important synthetical products yet produced, are not new and wholly independent creations, but transformation products of eugenol and citral respectively, and therefore, although they may compete with and be substituted for one natural product, they increase the demand for another, and provide new and important markets for the distillers of clove oil and of lemongrass oil. In fact, when figures are consulted, the threatened extinction of the oil-distilling industry looks very problematical; and although the introduction of synthetic scents must modify the market position, the struggle appears to be keenest and competition fiercest amongst the producers of the artificial perfumes. Dr. Liebmann gave some figures to show how vanillin has been reduced in price, but we cannot resist the reflection that if vanillin at 851. per lb. was able to compete with vanilla, the demand for the latter has not decreased. Logically, it should have entirely ceased long ago. Dr. Liebmann said the fall in price of orris-root from 300s, to 40s, per 100 kilos. was due to the substitution of the concrete oil of violets by the synthetic ionone; but we know there is as much of the natural product distilled as ever, and the fall in the price of the raw material is mainly due to over-production. In fact, all experience seems to show that synthetic oils do not displace the natural perfumes which they im tate. Another form of synthetic production which is gaining ground on the Continent, and which the essential-oil distiller will have to consider more seriously, is the scientific reproduction of essential oils from their components in accordance with careful analyses which have been made of the natural product. Of course, this will only repay the manufacturer in the case of the more valuable oils, such as the oils of jasmine, rose, and neroli, and the advantage comes in that some or all of the components may be drawn from cheaper sources than from the oil it is desired to reproduce. Whether this form of synthesis (a sort of blending under analytical æqis) will eventually oust the efforts of the perfumer who is guided solely by his nose, is a problem not easily settled. Last week we drew attention to another aspect of the matterviz., the utilisation of scientific knowledge of essential oils for the purpose of sophisticating these oils in what may be called a scientific way. Mr. Bennett's paper on oil of peppermint, which we print on page 591, tells how the acetyl derivatives of glycerin are being used for adulterating that oil. The nature of the sophisticant is such that the stuff must have been made for adulterating the oil with the knowledge that its behaviour towards the reagents and methods by which the essential quality of the oil is determined, would make experts hesitate to say the oil was impure. We fear that much more of this sort of thing has yet to be exposed.

The Mystery of Radium.

It deepens. In the *Times* "Ignoramus," and another anonymous person who gets large type, continue to express their awe of Sir William Crookes's extreme wisdom, but chaff his arithmetic and his fourth state of matter. *Nature* and the *Chemical News* of last week contained Sir William's Royal Society paper on the behaviour of radium: it is a plain narrative of his laboratory observations. In Sir William's own journal there is a translation of a *Comptes Rendus* paper on "Heat Evolved by Radium Salts," Professor Curie and A. Laborde being the authors. They say:

If we look for the origin of the heat in an internal transformation, this transformation must be of a very profound nature, and must be due to a modification of the atom of radium itself. However, such a transformation, if it exists, takes place with extreme slowness. Indeed, the properties of radium show no variation after several years, and Demarçay observed no difference in the spectrum of the same specimen of radium chloride during experiments made at intervals of five months. If therefore the above hypothesis is correct, the energy brought into play during the transformation of the atoms must be extraordinarily great. The hypothesis of a continuous modification of the atom is not the only one compatible with the evolution of heat by radium. This evolution can also be explained by supposing that radium is capable of utilising an external energy of unknown nature.

Sir Oliver Lodge is ruthless in scientific argument. Following up a note in *Nature* on Curie and Laborde's paper, he says:

Concerning the recently discovered heat-emission from radium, it is perhaps worth noting that it appears to be connected with, and is probably an immediate consequence of, the remarkable observation by Rutherford that radium emits massive positively charged particles, which are probably atoms, with a velocity comparable to one-tenth of the speed of light (see Phil. Mag., February, 1893). Because it is easy to reckon that the emission of a million heavy atoms per second, which is a small quantity barely weighable in a moderate time such as a few weeks (being about the twentieth part of a milligramme per century), with a speed equal to one-tenth that of light, would represent an amount of energy equal to one thousand ergs per second—that is to say, would correspond to heat enough to melt a milligramme of ice every hour. And inasmuch as these atoms are not at all of a penetrating kind, but are easily stopped by obstacles, they would most of them be stopped by a small thickness of air, and their energy would be thus chiefly expended in the immediate proximity of the source, which source would thereby tend to be kept warm. It would appear on this view as if by enclosing a bit of radium in a small chamber formed of massively obstructing non-conducing walls that it could be made quite hot, provided always that the assumed necessary stimulus, or external supply of molecular energy, could get at it uninterruptedly. If, in the open, the rate of escape of heat were such that on the average it accumulated for one minute before escaping, the temperature of source and ambient air, with an assumed heat-capacity equal to that of 1 milligramme of water, would amount to $1\frac{1}{2}$ ° C.

After this the only mystery appears to be the price of radium, but here again the omniscient Press is ready with a full explanation:

In Professor and Madame Curie's laboratory in Paris at the Ecole de Physique et de Chimie Industrielle there is a tiny tube of chemically pure chloride of radium. This, M. Curie declares, is the only sample of it in a pure state that exists in the whole world. It is about the size of a buckshot, and contains less than $\frac{1}{100}$ of a gram. M. Curie told an interviewer that it had any value that one wished to give it, but that 5,000*l*. would not buy it. It was with this sample that radium proved itself to be a new element, for it showed no lines in the spectroscope other than those characteristic of the metal. Many London medical men are anxious to try the effects of radium radiations on pathogenic micro-organisms. The present market-price, however, of fairly pure radium is 400*l*. per lb., and during the past three years only between 500 and 600 grams of the new element have been manufactured.

The next stage in the matter will probably be entitled "The Radium Fuss as an Element in the Gentle Art of Publicity."

Anti-substitution in the Daily Press.

Simultaneously in the *Daily Telegraph* and the *Daily Mail* this week appear articles in regard to substitution. The *Telegraph* contents itself with giving an abstract of a long letter from "Fair Trade," who writes about

"the manner in which many tradesmen of the present day endeavour to supply their customers, not with what they want, but with what they (the tradesmeu desire to sell." This practice, our correspondent states, is common at all sorts of shops—at those of chemists, grocers, wine and spirit purveyors, drapers, dealers in photographic materials, and also at restaurants, public-houses, and railway bars.

This is elaborated with detail. The Mail's campaign takes the shape of a series of articles entitled "The Fraud of the Label." The first, published on Tuesday, was introductory, and the second deals with "Just as Good as So-and-So's." So far the sanest thing the writer of the article has said is:

Of course, there is a chance—generally a very poor chance—that the substitute is really as good as the original article, but in

any case the public are being imposed upon and badly treated if they cannot get what they ask for without pressure being put upon them to purchase something else instead . . . It is not only the small shops in back streets which practise this wholesale substitution; some of the largest stores in the most important thoroughfares, with branches all over the country, are the greatest offenders. And what makes their trickery worse is that they are veritable academies of the fine art of deceit.

Oil of Peppermint.

A New Adulterant.

By C. T. BENNETT, Pharmaceutical Chemist.

A SAMPLE of peppermint oil was recently submitted to Mr. John C. Umney for analysis which, judged by general appearance, odour, and taste, showed no abnormal features, but on examination was found to have physical and chemical characters quite different from a pure oil. Under Mr. Umney's direction I made a number of experiments in order to ascertain the character of the adulterant, if such were present. The results of this investigation proved that the oil contained at least 15 per cent. of a body not hitherto detected, as far as I am aware, in any essential oil.*

This body has been identified as purified "acetine," a mixture of the three acetic esters of glycerin. It can be produced fairly cheaply on a large scale by heating together glycerin and glacial acetic acid for several hours, the commercial product being used as a solvent for indulin and other colouring-matters used in calico-printing. It usually contains free acetic acid and glycerin.

It is of interest to record these experiments, showing how the presence of this body affects the chemical and physical characters of peppermint oil.

Characters of the Adulterated Oil.—The sample had only a slight yellow colour and a fairly strong odour of peppermint. Its physical and chemical characters are shown by the following figures:—

The oil was soluble in two volumes of 70-per-cent. alcohol, but on the addition of more 70-per-cent. alcohol it became turbid, and oily drops floated on standing. Acetylation decreased the apparent percentage of esters.

The oil left no translucent stain when evaporated on blotting-paper, showing absence of fixed oils. No separation of menthol occurred when immersed in a freezing mixture and a few crystals of menthol added. On distilling 10 c.c. under atmospheric pressure the following figures were obtained:—

		T 1 0000 0 50	
Below	180° C., nil.	Below 220° C., 50 per	cent.
	190° C., 5 per cent.	" 225° C., 58	,,
	195° C., 14 ,,	" 230° C., 66	,,
23	200° C., 24 ,,		"
33	205° C., 28 ,,	,, 240° C., 80	"
33	210° C., 35 ,,	Residue 20	19
	215° C., 43		

The distilled portion was soluble without opalescence in four volumes of 70-per-cent. alcohol, and had the following characters: Sp. gr., 0.936; optical rotation, -16°; and refractive index, 14590.

The residue was also soluble in 70-per-cent, alcohol, and had characters as follows: Sp. gr., 1·147; refractive index, 1·4450; saponification-number, 6330; equivalent, 886; and boiling-point, about 250° C.

On receipt of a further supply, 80 c.c. of the oil was distilled under reduced pressure and separated into eight

^{*} Triacetin occurs in the oil from the seeds of Euonymus europæus,

fractions. A similar quantity of pure American (Wayne County) peppermint oil was also fractionated under reduced pressure of 22 mm. for comparison. The results are given below:-

Efforts to procure a sample of acetin in London having failed, a small quantity was prepared by heating glycerin with acetic anhydride for some hours. The product was extracted with ether after neutralisation, and purified by

Adulterated Oil				(S		e Oil Ref. Index 1 [,] 46	45)	
Fractions	Quantity	Sp. Gr.	Rotation	Ref. Index	Quantity	Sp. Gr.	Rotation	Ref. Index
1 2 3 4 5 6 7 Residue	$12\frac{1}{2}\%$ $12\frac{1}{2}\%$ $12\frac{1}{2}\%$ $12\frac{1}{2}\%$ $12\frac{1}{2}\%$ $12\frac{1}{2}\%$ $12\frac{1}{2}\%$ $12\frac{1}{2}\%$ 19%	0·900 0·902 0·910 0·920 0·926 0·938 	-15° -15° -14° -16° -26° -22° -	1·4645 1·4670 1·4650 1·4640 1·4640 1·4640 1·4640 1·4450	12½ % 12½ % 12½ % 12½ % 12½ % 12½ % 12½ % 12½ %	0.898 0.903 0.907 0.910 0.912 0.912 0.915 0.962	10°14°16°20°23°23°34°	1·4660 1·4635 1·4645 1·4640 1·4615 1·4615 1·4630 1·4790

It will be seen that in the case of the pure oil no portion had a sp. gr. of more than 0.932, while in the case of the abnormal oil the sp. grs. of fractions 4, 5, and 6 were distinctly higher than the corresponding fractions of the pure oil, the residue having a sp. gr. of 1.147, and a much lower refractive index than that of any normal constituent of peppermint oil.

By distilling a much larger quantity of the oil, about 15 per cent. of a heavy liquid was obtained which was further separated into six fractions (pressure 22 mm), the last two fractions (representing about 55 per cent.) boiling at a fairly constant temperature, and having almost identical characters. The details are here given:

-	Temperature	Quantity	Sp. gr.	Opt. Rotation	Ref. Ind.
1 2 3 4 5 6	Below 145° C. " 158° C. " 165° C. " 165° C. " 170° C. " 170° C.	10 % 10 % 10 % 10 % 20 % 35 %	0·972 1·050 1·134 1·155 1·161 1·166	-13° -9° Practically nil	1·4540 1 4482 1·4395 1·4370 1·4355

Characters of the Adulterant.—Fraction 6 was a thick, heavy, nearly colourless liquid, which boiled under ordinary atmospheric pressure at 261° C. It did not solidify when immersed in a freezing mixture, and was entirely volatilised by heat, the vapour burning with a luminous flame. It contained no nitrogen, sulphur, or halogen, and yielded much potassium acetate on saponification with aqueous potash, but no methyl or ethyl alcohol. It was soluble in ether and in weak alcohol, the solution being neutral to litmus, and giving no reaction with ferric chloride. It absorbed on saponification 67 16 per cent. of potash, showing a saponification-equivalent of 83.5. It absorbed no bromine in ethereal solution, and gave no reactions for succinie, oxalie, or any other acid, except acetic. Nitric acid attacked it, with evolution of nitrous fumes and the formation of a yellowish compound. It had no action on Fehling's solution and did not combine with phenylhydrazine. Potassium permanganate was decolourised by it in acid solution. When heated with lime the odour of acetic acid was developed and an inflammable vapour was evolved. It yielded acetic ether in the cold on addition of alcoholic potash, and also on heating with alcohol and hydroehlorie acid.

The characters of this adulterant appeared to indicate that it consisted of an optically inactive organic ester of high specific gravity, high boiling point, and low refractive index, which readily yielded acetic acid on decomposition. The only substance which could be found to fulfil these conditions was acetin. Glycerin was detected in the saponified portion by Dunstan's test, and confirmed by the acrolein reaction. Traces of oxalic acid were also obtained by careful oxidation. The presence of acetic acid in the saponified residue was proved by the formation and estimation of the saponified residue was proved by the formation and estimation. tion of the silver salt, as well as by qualitative chemical tests. The saponification-equivalent indicates that the substance is not pure triacetin, but a mixture of the three acetie esters of glycerin.

distillation under reduced pressure. The specific gravity of this sample was 1.187, and its refractive index 1.4442. It still contained traces of glyccrin, and had a sweetish, slightly acid taste.

In order to separate, if possible, the three main constituents, this was again distilled under reduced pressure, and divided into four fractions, the characters of which were as follows:-

_	Sp. Gr.	Refractive Index	Bp. at Baro- metric Pressure
I.	1·153	1·4318	248°-260° C.
II.	1·176	1·4427	257°-261° C.
III.	1·193	1·4462	258°-262° C.
IV.	—	1·4480	261°-265° C.
Glycerin	1·260	1·4675	290° C.

Working on a small quantity it was found very difficult to obtain pure products, but the chemical characters of all the fractions agreed with those of the adulterant separated from the peppermint oil, proving beyond doubt its identity.

On account of the limited quantity of oil at my disposal it was useless to attempt an ultimate analysis, owing to the difficulty of separating the three esters in a pure condition.

The characters of the acetins, as described by the various text-books and chemical dictionaries, are somewhat variable, probably for the same reason—the difficulty of separation. According to the most recent works the following are the chief properties :-

Monacetin has a sp. gr. of 1.20. It forms a clear liquid with half its bulk of water, but becomes turbid on addition of two or more volumes of water. It is a neutral liquid with a faint ethereal

Diacetin.-Sp. gr. at 15° C., 1.188; boiling-point, 280° C. A

neutral odoriferous liquid, having a sharp taste.

Triacetim.—Sp. gr. at 15° C., 1160; boiling-point, 258°-259° C.

A neutral odoriferous liquid, having a sharp and slightly bitter taste. Miscible with alcolo', ether, chloroform, and benzol. Soluble in about 14 parts by weight of water. (Watt's Dictionary states that it is insoluble in water.)

All these esters are produced by heating glycerin with glacial acetic acid, a greater proportion of the latter at a high temperature producing more of the triacetin.

I have made attempts to devise a ready test which might be applied by brokers in order to detect this adulterant, but have been unable at present to improve upon the Pharmacopæia solubility-test, which, however, might pass an oil containing a small quantity of acetin. The production of acetic ether in the cold on addition of alcoholic potash is characteristic but hardly conclusive, and could not easily be detected by the nosc in a strong-smelling oil.

My thanks are due to Mr. John C. Umney for his help and suggestions, and to Messrs. Wright, Layman & Umney (Limited), in whose laboratory the above experiments have been carried out.

Legal Reports.

Trade Law.

Personal Injuries.—John Sloberstinsky, a ladies'-tailor's machinist, of Spitalfields, went into the shop of a Mr. Cohen (described as a chemist), 82 Hanbury Street, E., on August 23 last, for something for face-ache and toothache, and the assistant gave him what looked like a bit of candle to paint his face inside and out. He did, and it turnel out that the remedy was "caustic." Mr. Justice Grantham and a jury heard all about it on April 2, and gave plaintiff 5l. damages in respect of the injury done.

Ts a Cheque Payment?—In the Westminster County Court on April 6, Judge Woolfall heard the case of Currie v. Yearsley, in which the plaintiff, trading as the Victoria Seats Agency, sued the defendant to recover payment in respect of a cheque given in payment for places to view the Naval Review in June last year. The defendant's case was that as the review was abandoned in consequence of the King's illness he was justified in stopping his cheque. He further contended that on a point of law a cheque in these circumstances was not an actual payment, and could not be recovered. The Judge held that the cheque was good payment, and gave judgment for the plaintiff with costs.

A Nitrous-oxide Patent.-Mr. Justice Wright had before him on March 2, the case of Coxeter and others v. Marston. plaintiffs (makers of nitrous-oxide gas for dentists) sued the defendant-Mr. Robert Marston registered dentist, Leicester-for 6,500l. damages for failing to carry out a contract made with them to erect plant in their works for producing nitrous oxide from atmospheric air. Plaintiffs make 14,000,000 gals, of the gas yearly from ammonium nitrate, and the sum sued for was the difference in value reckoned upon the 20-per-cent saving which the defendant claimed his process (which was covered by two patents) would effect. Plaintiffs stated that they had made all arrangements for the plant to be installed on August 12, 1902, but on August 11 the defendant wrote saying that he would not go on with the matter. Plaintiffs, therefore, claimed a declaration that the defendant's notice of August 11, 1902 was of no effect and specific performance of the indenture by forthwith erecting and completing the plant, and an injunction restraining the defendant or his agents from using his inventions or vending any of the products arising therefrom for two and a quarter years from January 25, 1902, the term of the agreement. The defendant explained to his Lordship that he granted the licence to the plaintiffs conditional on their promise to find room at their works in Hereford Road, London, for the plant; but when it was delivered to them they sent it to Pelham Mews for storage, thus laying it aside and shelving his inventions. They had not fixed any of the royalties which they covenanted to pay, they had wrongfully obtained his plant for which they had no room, they had coerced him into selling his gasholder which they threatened to build permanently into their works and now were using in the manufacture of nitrous oxide. He asked for a declaration that his revocation of plaintiffs' licence was valid, for the recovery of his plant, and for 2,000% damages and costs. His Lordship suggested that the matter was one for private arrangment, and after some conversation it was agreed that both parties "cry quits."

Medicine-stamp Acts.

ELEVEN OFFENCES.

At the Mansion House on April 6, before the Lord Mayor, Mr. George Peter Pond, ehemist and druggist, 68 Fleet Street, London, was charged by the Inland Revenue Department with selling on various dates in January eleven different medicines to which the proper medicine-stamp had not been affixed. The articles were (1) eye-lotion, "for inflammation"; (2) Pond's extract of areca-nut, tannin, and myrrh, held out on a wrapper as an effectual preventive for toothache and decay; (3) effectual liver-pills, "for the head, stomach, and liver"; (4) Pond's pine-oil ointment, "for hæmorrhoids, &c."; (5) Pond's pine-oil suppositories, "for hæmorrhoids"; (6) Pond's wild-cherry cough-mixture, "for coughs, colds, brenchitis, &c. G. P. Pond, sole proprietor"; (7) Pond's pine magnetic liniment, "for sprains"; (8) arnicated solvent plaster, "for corns and bunions"; (9) nerverestorer, "a certain cure," &c.; (10) Pond's eoto-bark remedy; (11) Pond's invaluable cough-lozenges, "for the cure of," &c. Defendant, through his counsel, Mr. Slater, pleaded guilty.

Mr. G. H. Denniss, Barrister for the Inland Revenue Department, said defendant was liable, under Sec. 2 of 52 Geo. III., Chap. 150, to a penalty of 10t. for each offence.

Mr. Denniss pointed out the words which made the articles liable to stamp-duty, and was explaining the section of the Act, when the Lord Mayor, interrupting, said, "I know the Act." Proceeding, Mr. Denniss said that altogether seventeen articles were purchased at defendant's shop, and only four were stamped. In two cases the Commissioners were satisfied with the explanation which Mr. Pond gave. The stamp-duty brought in a pretty considerable sum in the course of the year, and here was a case in which the revenue is being evaded in a wholesale manner.

The Lord Mayor: Is defendant a wholesale chemist?

Mr. Slater: Only retail, my Lord.

The Lord Mayor: This seems to be a new point. I should like to know whether the Inland Revenue Department claim that every preparation sold by a chemist should be stamped.

Mr. Denniss: Yes, if they are held out by any label or words that they are beneficial for, or a cure for, or a relief for any disorder or ailment of the human body.

The Lord Mayor: This certainly looks as though a new campaign is being instituted against the chemists.

Mr. Denniss: Oh, no; these prosecutions have been going on for the last hundred years.

The Lord Mayor: But you may go into any chemist's shop in Lordon and find the same thing being done

in London and find the same thing being done.
Mr. Denniss: But the proprietary medicines are stamped,

Mr. Denniss: But the proprietary medicines are stamped, or should be, if they are recommended for particular ailments. You will find that they are sold at 1s. $1\frac{1}{2}d$. the $1\frac{1}{2}d$ being for the stamp. Besides, it is common knowledge among the chemists that these articles should be stamped under the Stamp Duties on Medicines Act.

Mr. Slater said the only explanation he could offer was that in making up some of the articles the stamps were unavoidably omitted. Mr. Pond is, he said, a high-class chemist of forty-five years' experience, and leaves the making of these articles in the hands of a lady assistant who must somehow have unavoidably left off the stamps. He (counsel) would have raised points as to the liability of the cye-lotion, liver-pills, and corn-plaster; but he would not go into the matter owing to a divisional court decision of a fortnight ago. To show the difficulty of finding out what articles are liable to stamp-duty, he stated that the Inland Revenue Department some time ago declared that "arnicated solvent corn and bunion plaster" is not liable, whilst apparently "arnicated solvent plaster for eorns and is. He (counsel) might also have raised such bunions points as that in such a description as liver-pills the liver is not an ailment, but an organ of the body. Liver-complaint is not an ailment of the human body.

Mr. Denniss: If you look in the dictionary you will find it described as such.

The Lord Mayor: It is certainly more comfortable to the human body to have the liver all right. (Laughter.)

Mr. Slater: Then there is the preparation for corns and bunions—it cannot be said that that is for an ailment of the human body. (Laughter.) However, I will not press it. He asked his Lordship to deal as leniently as possible with Mr. Pond on account of his high position.

The Lord Mayor: I fine defendant 10s., with 2s. costs, in

each case.

High Court Cases.

ANTIRHEUMATIC RINGS.

In the Chancery Division on Thursday and Friday, April 2 and 3, before Mr. Justice Farwell, the case of Kimball v. Newball and others eame on for hearing. The action was for an injunction to restrain the defendants from selling and passing off antirheumatic rings as and for the goods of the plaintiff; also for a declaration that an agreement, dated January 18, 1892, made between Fredk. W. Kimball and Mr. A. H. Newball, was determined.

Mr. Butcher, K.C., who, with Mr. Maughan, appeared for the plaintiff, stated that Fredk. W. Kimba I was the inventor of a secret process for manufacturing rings which were said to be a specific for rheumatism, and which had obtained a large sale under the name of "Kimball's antirheumatic rings." By the agreement in question Newball acquired the right of exclusively selling in Great Britain the rings manufactured by the plaintiff, and by the terms it was provided

that Newball should not himself sell or aid in selling rings of the same character not manufactured by the plaintiff. If this term was violated it was arranged that the agreement should be terminated, and that the vendor should be paid a sum of \$10,000 as liquidated damages. In February, 1901, the business of F. W. Kimball was assigned to the present plaintiff, and in the same menth Newball died, administration of his estate being granted to Mrs. M. E. Newball, who, it was alleged, recently purported to sell the agreement or some interest in it to a Mr. J. A. Storey. It was also contended that Storey and Mrs. Newball had at various times, and in breach of the agreement, offered for sale rings not manufactured by the plaintiff as Kimball's antirheumatic rings.

During the hearing of the case it was admitted that the defendants had committed a breach of the agreement, and his Lordship, in the result, granted the injunction asked, and made a declaration to the effect that the agreement was at an end

"ABSORBINE" TRADE-MARK.

In the Chancery Division of the High Court of Justice on Friday, April 3, before Mr. Justice Joyce, Mr. Sebastien said that in this case he had a motion, on behalf of the plaintiff, to restrain an alleged infringement of a registered trademark for a veterinary medicine called "absorbine." Mr. Hewitt, for the defendant, had informed him that it was the defendant's intention to apply for a rectification of the register. In these circumstances the motion could not be forced on, and the rectification motion would go into the witners-list. Mr. Justice Joyce thereupon directed the motion to stand over until the trial of the action, the costs to be costs in the action.

A BEECHAM CASE.

In the Chancery Division of the High Court of Justice on Tuesday, April 7, Mr. Justice Buckley had before him a motion by Mr. Thomas Beecham, St. Helens, for an injunction to restrain Mr. Featherstone, chemist, Tunstall, from selling as Beecham's pills pills not of the plaintiff's manufacture. Mr. Martell, who appeared for the plaintiff, said the defendant submitted to a perpetual injunction in the terms of the notice of motion, and to pay an agreed sum for damages and costs. His Lordship made the order as asked for.

Bankruptcies and Failures.

 $\wp \exists Re$ S. Halliday, Cleckheaton, Chemist and Druggist.—The Official Receiver of the Bradford Bankruptcy Court reports that the assets in this case, after meeting the preferential claims and the costs, will allow of the payment of a first and final dividend of 1s. $6\frac{3}{4}$. in the pound.

Re EDWARD WALTER FOULKES, 7 Highland Terrace, Ramsgate, formerly in husiness as Pelham's Medicine Company, at 188 Fleet Street, London, E.C.—This dehtor applied to Judge Sir W. L. Selfe at Canterbury Bankruptcy Court on March 31 for his discharge from bankruptcy. After hearing the Deputy Official Receiver, the Judge suspended the discharge for four years.

Re Edward Ernest Brunsden, 14 Body Road, Reading, Chemist's Assistant.—The first meeting of creditors was held on April 2, at Reading, before Mr. Cecil Mercer, Senior Official Receiver. The debtor made no offer, and an order of adjudication and summary administration having been made, the matter was left in the hands of the Official Receiver to wind up in bankruptcy. The following are creditors: Mrs. Mary Brunsden, Reading, 50l.; M. J. Jarvis, London, 20l.

Re Alfred Isaac Levy, trading as J. H. Morrison & Co., at 20 Houndsditch, E.C., Sponge Merchant.—Bankrupt applied to Mr. Registrar Brougham at the London Bankruptcy Court on April 3 for an order of discharge from proceedings instituted by a creditor in November, 1901. The Official Receiver reported that the dehts amounted to 383L, and there were no assets. The discharge was suspended for two years, on the grounds of insufficiency of assets to pay 10s. in the pound to the creditors and imperfect hooks.

THE GERMAN A.S.S.—The seventy-fifth general meeting of German naturalists and doctors is to be held on September 20 to 26 at Kassel.

Bazette.

Partnerships Dissolved.

- Creak, A. E., and Murison, W. R., under the style of Creak & Murison, Erith, Kent, general medical practitioners.
- Goyder, D., M.D., and Rawson, W. F., F.R.C.S. Ed., L.R.C.P. Lond., Bradford, surgeons and general medical practitioners.
- Kroeger, M., and Hopkins, H. W. under the style of H. W Hopkins & M. Kroeger, "The Light Cure Institutes," Elizabeth Street, Eaton Square, W., and Eastbourne.
- Newlands, B. E. R., and Ling, A. R., under the style of Newlands Bros. & Ling, St. Dunstan's Hill, E.C., analytical chemists.
- Pimblett, W. H., and Ramsay, A., under the style of Pimblett & Ramsay, Preston, physicians and surgeous.
- Roberts, S. J., and Underwood, A. C., under the style of Roberts & Underwood, Saltley, Warwickshire, physicians and surgeons.
- Shackleton, J., and Helliwell, T., under the style of Ormerod, Taylor & Son, Walsden, near Todmordon, and elsewhere, drysalters and manufacturing chemists.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

Isenberg, Simon (trading as Isenherg & Son), Lower Chapman Street, Commercial Road, E., grocer and provision merchant and mineral-water manufacturer.

ADJUDICATION.

Atkinson, Robert, formerly Great Queen Street, W.C., now St. Anton, Austria, photographic-apparatus manufacturer.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Denan, John Eustace, Chilverton Road, Putney, and Sloane Terrace, Sloane Street, S.W., dentist—discharge suspended for four years, ending March 4, 1897.

Deed of Arrangement.

Bowes, Francis Henry, 67 Clifton Road, Exeter, chemist and druggist. Trustee, Henry W. Gould, 2 Bedford Circus, Exeter, solicitor. Dated, March 30; filed, April 4. Liabilities unsecured, 4341 9s. 1d; estimated net assets, 1401. Amongst the creditors are:—

,	£	s.	α .
Bowes, F. A., Kirbymoorside	150	0	0
Bowes, S. C., Kirbymoorside	100	0	0
Evans, Gadd & Co., Exeter	46	0	0
Evans Sons Lescher & Wehb (Limited),			
London	17	0	0
Josephs, P., & Son, London	30	0	0
Popman, Mrs., Exeter	11	0	0
Tidman & Sons (Limited), Loudon	16	0	0

Hew Companies & Company Hews.

Carews (Limited).— Capital 3001, in 11. shares. Objects: To acquire the business now carried on at 8 Queen Street, Cardiff, as "A. Carew," and to carry on the husiness of teeth-specialists, manufacturers of and dealers in artificial teeth and dental, chemical, surgical and anatomical apparatus, &c. The first subscribers are:—J. W. Hook, 107 Arabella Street, Cardiff, salesman; Miss E. Carew, Elmfield, Sandyford, co. Dublin; Miss M. O'Leary, 63 Charles Street, Cardiff; publisher; J. W. Cooper, 171 Castle Road, Cardiff, mechanic; P. Carew, 52 Millmount Avenue, Dublin, traveller; and J. Mayrick, 17 Temple Street, Dublin, wine merchant.

Belsize House (Limited).—Capital 6,0007., in 17. shares. Objects: To carry on the business of a rest-home or establishment for the reception, heard, lodging, and medical treatment of persons suffering from diseases of the nervous system and habitual use of drugs; to adopt an agreement with Mr. J. H. Chaldecott, L.R.C.P., Lond., and F.F.P.S., Glasgow, and to supply to resident

or non-resident patients trained nurses, medicines, chemicals, medical and surgical appliances, medicated and other baths, &c. No initial public issue. The subscribers are to appoint the first directors. Qualification, 1007. Regumeration as fixed by the company. Registered office, 122 Cannon Street, E.C.

SCHWEPPES (LIMITED).—The directors recommend a final dividend of $3\frac{1}{2}$ per cent, making 7 per cent, for the year, on the ordinary shares, and 2 per cent, for the year on the deferred shares, placing 6,000% to reserve and carrying forward 5,000%.

SALE OF SHARES.—At Sheffield last week 50 11. (f.p.) shares in Boots Cash Chemists (Eastern) 5 per cent. second preference were disposed of at 21s. 6d. each; 20 11. (f.p.) Boots' Pure Drug Company 6 per cent. "C" preference at 23s. 6d. each, and 100 11. (f.p.) Boots' Cash Chemists (Lancashire) 6 per cent. preference at 23s. 6d. each.

SCOTTISH COMB COMPANY.—The report states that the year's trading had been conducted at a loss of 26711. The directors recommend an amalgamation with the Aberdeen Combworks Company, with whom they have come to a provisional arrangement, which will be submitted to the consideration of the shareholders.

BROOKE, SIMPSON & SPILLER (LIMITED).—At an extraordinary meeting held on April 3, Mr. F. S. Lucey presiding, it was unanimously agreed that the capital of the company be reduced from 150,000l. to 30.000l., and that such reduction be effected by cancelling capital which has been lost or is unrepresented by available assets to the extent of 4l. per share upon each of the 2,080 pound shares which have been issued and are now outstanding, and by reducing the nominal amount of all the shares in the company's capital from 5l. to 1l. per share.

Mellin's Food (Limited).—An extraordinary meeting of this company was held on April 2. The Chairman (Mr. E. C. Bliss), after referring to the death of Mr. Mellin, said the board would be strengthened by the addition of Dr. J. J. Pilley, F.C.S., and Mr. J. E. Maull, who has been secretary of the company for twenty years. The meeting was called to obtain the sanction of the shareholders to the negotiations which have been entered into by the board for the purchase of the American royalties, the income derivable from these being more than sufficient to pay the dividend on the 6 per cent. preference shares, independently of any earnings of the company. The resolution was unanimously agreed to.

Business Changes.

Mr. A. Roe, chemist and druggist, is opening a business at 31 Old Compton Street, W.

MR. E. THOMAS, chemist and druggist, has recently opened business premises at 78 Long Acre, W.C.

Mr. T. M. CHESTERFIELD, chemist and druggist, has opened a business at Canterbury Street, New Brompton, Kent.

Mr. W. H. JONES, chemist and druggist, has opened a compact attractive pharmacy at Oxford Street, Mountain Ash, Glam.

Mr. F. J. BOTHAMS has acquired the premises at 164 Blackfriars Road, S.E., which he will shortly open as a pharmacy.

MR. J. E. MALLINSON, chemist and druggist, of Hornsey, N., will shortly open the Central Pharmacy, opposite the Central Station, at Folkestone.

MR. W. E. CLARKE, pharmaceutical chemist, High Street, Strood, Kent, is having a handsome pharmacy fitted up at High Street, Rochester.

MESSIS. ROBERTS, OSBORNE & Co. have opened drug-stores at 73 Penrhiwcciber Road, Penrhiwcciber, and 3 Aberfan Crescent, Aberfan, Glam., South Wales.

Mr. S. C. F. Michell, chemist and druggist, has succeeded to the business at St. Austell, formerly carried on by his father, Mr. T. G. Michell, lately deceased. Mr. C. J. R. Pretty, chemist and druggist, late with the Army and Navy Stores, has opened the Woodside Pharmacy at Wimbledon Park, Wimbledon, S.W.

Mr. J. W. Burchnall, chemist and druggist, late of London, has purchased the business at 60 Queen Street, Ramsgate, carried on since 1890 by Mr. James Argue, chemist and druggist.

MR. E. DENIS OWEN, chemist and druggist, has opened new premises at 135 Victoria Road, Middlesborough, with fittings supplied by Messrs. Evans Sons Lescher & Webb (Limited), Liverpool and London.

The chemist's shop, recently vacated by Mr. T. S. Slater, chemist and druggist, Stretford Road, Manchester, has been taken by Messrs. J. L. Smith & Co. (Limited), chemists, of Newcastle Street, Hulme, who are closing their present premises.

A NEW pharmacy has just been fitted up for Mr. A. H. M. Purse, chemist and druggist, Sunderland, by Messrs. Ayrton & Saunders, of Liverpool. The Burn Park Pharmacy is in New Durham Road, and is a good example of handsome cabinet-making.

MR. H. LLOYD JONES, chemist and druggist, has opened new premises at 420 Prescot Road, Stanley, Liverpool. The interior shopfittings, window-enclosures, and shield-recess shoprounds have been supplied by Messrs. Evans Sons Lescher & Webb (Limited), Liverpool and London, who have made a very attractive pharmacy.

Personalities.

Mr. G. BULT FRANCIS will not, we are now informed, return to this country until July.

MR. ANTHONY W. CRISP, dispenser, has been elected to a seat on the Martham Rural District Council.

Mr. J. Baynes, F.I.C., pharmaceutical chemist, has been appointed public analyst for Hull at a salary of 200%, per annum.

Mr. Alfred E. Batchelor, chemist and druggist, West Street, Fareham, has been re-elected a member of the District Council.

MR. T. H. PRICHARD, chemist and druggist, Abertillery, has been elected a member of the Abertillery Urban District Council.

Mr. W. Jesse Williams, pharmaceutical chemist, Cardiff, has been appointed overseer for the parish of St. John's, Cardiff.

Mr. A. J. PALETHORPE (Messrs. Robert Ferber & Co., 195 Southwark Bridge Road, S.E.) has removed to Victoria Villa, Bingham, Nottingham.

Mr. Francis Sutton, F.I.C., pharmaceutical chemist, Norwich, has been reappointed County Analyst for Norfolk, at a fee of 15s. for each analysis.

MR. WILLIAM B. RAMSDEN, B.Sc., son of Mr. William Ramsden, chemist and druggist, Fallowfield, has obtained the M.B., B.S., degree of Victoria University.

MR. W. HALL JOWETT, F.C.S., chemist and druggist, managing director of Clayton & Jowett (Limited), essence-distillers, was last week elected an alderman of the City of Liverpool.

MR. P. JAMES, who has represented Messrs. Hockin, Wilson & Co. for the past eleven years, has been appointed by Messrs. Davy, Hill & Co., Southwark, S.E., as their country representative.

AT the election of the Stonehouse District Council, Mr. E. T. Wood, chemist, was returned at the head of the poll with 792 votes. Mr. H. T. Netting was also successful, having gained 411 votes.

MR. A. H. JONES (of Messrs, Ayrton & Saunders, Liverpool) has been elected a delegate to represent the Leeds Branch of the United Kingdom Commercial Travellers' Association at their annual conference at Bristol.

MR. JOHN W. BYGOTT has resigned his position as manager and traveller for Messrs. Hockin, Wilson & Co.'s Manchester branch, and is to represent Messrs. Lorimer & Co. (Limited), Britannia Row, N., in the same district.

Mr. H. W. EMERSON, who has for the past thirty years carried on business as a druggist at Seaham Harbour, is leaving the town for the South of England. Mr. Emerson was a member of the former Local Board and a parish overseer for many years. He was also Quartermaster and Honorary Captain of the Seaham Harbour Volunteers, as well as Secretary to the Fawcett Lodge of Freemasons.

Mr. Jas. E. Bush, chemist and druggist, Vice-Chairman of the Melksham U.D.C., has written a concise account of the biological or septic-tank method of treating sewage, which has been published as an eight-page pamphlet. It does not pretend to be exhaustive, but it gives the facts and useful information for those who want to carry out the system. The continuous filters invented by Mr. F. W. Stoddart, Bristol, are incidentally referred to. We daresay any of our subscribers who write to Mr. Bush will get a copy of his paper.

Births.

GIBBINS.—At 155 Uttoxeter New Road, Derby, on March 28, the wife of Richard Gibbins, wholesale druggist, of a daughter.

MACMASTER.—At 37 White Street, Partick, Glasgow, on April 3, the wife of Mr. Thos. Macmaster, chemist and druggist, of a son.

Marriage.

SWIFT—HOLT.—At Christ Church, Woodhouse, by the Rev. A. Whorlow, M.A., on March 26, Ernest Radcliffe Swift, chemist and druggist, Huddersfield, to Sarah Ann, eldest daughter of Mr. James Holt, farmer, Newhouse, Sheepridge, Huddersfield.

Deaths.

BORCHERT.—At Aston House, Netley, Southampton, on March 14, Mr. Heinrich Theodor Gustav Borchert, pharmaceutical chemist.

JURITZ.—At Villa Marina, Sea Point, Cape Colony, on March 13, Mr. J. P. Faure Juritz, chemist and druggist. Aged 72. Mr. Juritz was descended, on his mother's side, from the old Cape families of Faure and Brand, and his father (Dr. C. F. Juritz) was one of the oldest colonists, and a man of cosmopolitan sympathies. Mr. Juritz was born at Somerset West, and in his younger days was an enthusiastic mountaineer and botanist. Being proficient with the brush, he made a very complete set of paintings of the flora of the Cape Colony. In 1862 Mr. Juritz qualified as a chemist and druggist, and on the death of his father succeeded to the business of Dr. C. F. Juritz & Co. This business—which Mr. Juritz disposed of to Messrs. Heynes, Mathew & Co., of Cape Town, four or five years ago—was, perhaps, the oldest establishment of its kind in Cape Town. Previous to its acquirement in 1830 by Dr. C. F. Juritz, the business had existed for more controlled. Dr. C. F. Juritz, the business had existed for many years in the same building under Dr. Liesching. The "Angel Dispensary," as it was called, was known not only in the Cape Colony, but also in the Orange River Colony and the Transvaal. Mr. Juritz took an active part in all the great political, educational, and religious movements in the Colony. His kindly and affectionate disposition were wellmarked features of his life, and it was a sore affliction to him when, about twelve years ago, he lost his wife and two daughters within a few months. A daughter and three sons (one of whom, Mr. Charles F. Juritz, is known to pharmacy as the Senior Government Analyst of the Cape Colony) survive. Mr. Juritz died from septicæmia following an operation for prostatic enlargement, and it is characteristic of the man that, as was discovered from his papers after death, he had suffered for at least six years in absolute silence before the concealment of his malady became longer impossible.

Cox.—On April 6, at Brighton, Mr. Arthur Hawker Cox. Aged 90. Mr. Cox, the senior member of the firm of Arthur H. Cox & Co., St. Martin's Place, Brighton, is well known in pharmacy as the inventor or perfecter of the process of pearl-coating pills. He was born in 1813 in Haymarket, London, and was apprenticed to his uncle (Mr. Perrin, of Northampton), afterwards serving as an assistant in Dinneford's at 180 New Bond Street. Mr. Cox started business at



Ship Street, Brighton, in 1839, and almost at once began experimenting in pill-coating, the patent which he took out in 1854 being the result. The business resulting from the sale of coated pills grew apace, and in 1871 it was found necessary to erect a new factory at St. Martin's Place, which has been added to from time to time. Mr. Cox always took a prominent part in municipal life; he was thrice Mayor of Brighton, and only retired from the Council within the last year or so, on which occasion he was presented with an illuminated address setting forth the great services he had rendered to the town of his adoption. The end of an eventful life came peacefully last Monday evening, old ago alone being the cause. The management of the pill-business has been mainly in the hands of Mr. Cox's two sons for some years, and will, consequently, be continued without a break.

Hanbury.—On April 2, at Dynevor House, Richmond, Surrey, Sarah Jane, wife of Mr. Cornelius Hanbury (of Plough Court, E.C.), only daughter of the late Frederic Janson. Aged 73.

LITCHFIELD.—On April 1, at Longton, Mr. William Litchfield, chemist and druggist, of Stafford Street. Aged 56. Mr. Litchfield had been in failing health for some months, and died from pneumonia and heart-affection. His father was also a chemist in the High Street, Longton, and he succeeded to the business after gaining experience at Leamington, Coventry, and Rugby. As a botanist he was well known all over the county. He took an active interest in municipal matters, and only last November resigned the position as a member of the Corporation.

WORDSWORTH.—At Pontefract, on April 6, Mr. Fred Word worth. Aged 22. Mr. Wordsworth was the eldest son of Mr. J. N. Wordsworth, liquorice-cake manufacturer, Arnside, who served his apprenticeship to pharmacy with Mr. E. Yewdall, pharmaceutical chemist, Leeds. Mr. Wordsworth was a popular local cricketer and footballer.

Trade=marks Applied for.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost £1, obtainable through any money-order office.

(From the "Trade-marks Journal," March 18, 1903.)

- Combination of devices for "Extra-Cream" toffee. By John Mackintosh (Limited), Queen's Road, Halifax. 250,682.
- "Ferova;" for poultry-food. By Newth, Guymer & Co., 2 Leather Market, Weston Street, Bermondsey, S.E. 251,763.
- Combination of devices for a label; for Luce's eau de Cologne. By Luce's Eau de Cologne Company (Limited), 12 Little Britain, E.C. 249,653.
- "Coolarma" (no claim for "Cool") and "Escort"; for perfumery, &c. By E. Cook & Co. (Limited), Bow, E. 251,839 and 252,243.
- "SENLIM"; for perfumery, &c. By W. H. Milnes, 616 Birkbeck Bank Chambers, W.C. 251,898.
- "Wol-Root" ("Wol" essential particular); for perfumery, &c. By H. Engel, 23 Parson's Green Lane, Fulham, S.W. 252,016.
- "OSOLAIRE"; for toilet-articles, perfumes, &c. By J. S. Collins, North British Station Hotel, Edinburgh. 252,131.
- "Graziella"; for perfumery, &c. By F. Mühlens, Cologne, c/o P. M. Justice, 55 Chancery Lane, W.C. 252,330.
- "Strcco" (no claim for "Stick"); for a liquid cement forwater-proofing leather and an adhesive for leather. By C. J. Taylor, 4 Shepherd's Bush Road, Hammersmith, W. 249,934.

(From the "Trade-marks Journal," March 25, 1903.)

- "ICEO" (no claim for "ICE"); for freezing-powders. By H. Gebhardt & Co., Dashwood House, New Broad Street, E.C. 251,660.
- "Procol."; for photographic developers. By H. Brown, 107 Mansfield Road, Nottingham, chemist and optician. 252,361.
- "CORICHROM"; for a mordant. By W. & C. Pautin, 147 Upper Thames Street, E. C. 252,741.
- Barcd arm grasping lightning-flashes; for a veterinary embrocation. By G. Ellis, 164 New King's Road, Fulham, S.W. 251,219.
- "Chlorinol" (no claim for "Chlorine"); for disinfectants. By R. Armstrong, Saul Street Works, Preston. 251,618.
- "Gonosan"; for chemicals. By L. F. Riedel, Berlin, c/o Fairfax & Wetler, 37 Essex Street, Strand, W.C. 251,521.
- "Comprinettes"; for compressed tablets of chemicals. By Roberts & Co., 76 New Bond Street, W., chemists. 252,272.
- "Syniodules"; for pills, capsules, pastilles, and compressed tablets containing iodine. By La Société Lepinois aud Michel, Paris, c/o A. M. & W. Clark, 53 Chancery Lane, W.C. 252,381.
- "Lonart"; for goods in Class 3. By G. Potter & Sons, 44 Liddle Road, Newcastle-on-Tyne. 252,403.
- "Lygosin"; for medicine. By Zimmer & Co., Frankfort-on-Main, c/o Johnsons & Willcox, 47 Lincoln's Inn Fields, W.C. 252,441.
- "Nucellso"; for seltzogenes or gazogenes. By E. Chouanard, Paris, and 17 Harp Lane, E.C. 251,539.
- "Martello"; for toilet-paper. By W. J. Alcock, trading as the British Patent Perforated Paper Company, 32 Cowper Street, E.C. 252,079.
- "Novio"; for toilet-paper. By the Paper-cutting and Toiletrequisite Company (Limited), 90 Goswell Road, E.C. 252,383.
- "ROTOX"; for photographic paper, &c. By the Rotary Photographic Company (Limited), 14 New Union Street, Moorfields, E.C. 252,432.
- Device and the word "MALLETA"; for a beverage consisting of Liebig's extract of beef and extract of coca-leaves. By R. Walsh & Co., 14 Charlemout Mall, Dublin. 250,033.
- Combination of devices and the word "Maltico" (no claim for "Malt"); for infants' food. By Taylor & Sons, Kingston Cross, Portsmouth. 250,867, 250,868, and 252,216.

- Device of three spear-heads; for goods in Class 48. By Holt Brothers & Co., 81 Dale Street, Liverpool. 251,531.
- "Volosci"; for a hair-restorer. By C. G. Bowerman, trading as the Volosci Manufacturing Company, 279 City Road, E.C. 251,749.

In accordance with the order made by Mr. Justice Farwell (see C. & D., February 14, page 263), the trade-mark (No. 61,743) of James Cockle & Co., registered in accordance with the Trade-marks Acts (1883-1888), the Register of Trade-marks was on March 9, 1903, altered, by changing the address on the trade-mark from "18 New Ormond Street" to "4 Great Ormond Street," and by adding below the word "London" the words "Great Britain" in brackets.

Trade Motes.

THE UNIVERSAL FEEDING-BOTTLE.—We were wrong about the value of this bottle acting perfectly either way. Messrs. S. Maw, Son & Sons ask us to say that it only acts properly if inserted in (not over) the neck.

EASTER HOLIDAYS.—We understand that the following firms will close from Thursday night, April 9, to Tuesday morning, April 14: Messrs. Burgoyne Burbidges & Co., 16 Coleman Street, E.C., Fredk. Boehm and E. Merck, 16 Jewry Street, E.C.; and C. Zimmermann & Co., 9 and 10 St. Mary-at-Hill E.C.

"SANATORIUM" INHALER.—Messrs. S. Maw, Son & Sons, 7 to 12 Aldersgate Street, E.C., are now selling an improved Mackenzie's inhaler under the title "Sanatorium" inhaler. The body of the inhaler is made of metal, and on the front there is a little chamber of perforated zinc for cotton-wool. A bottle of formaldehyde solution is sent out with the inhaler, and the patient is directed to use a few drops at a time. The inhaler is likely to come into popular use. At present it is in demand in various sanatoria. It is supplied either nickel-plated or blacked.

ARROWROOT as a nutrient possesses, in cases of irritation of the alimentary canal, properties which no other food-stuff has, because it is retained and assimilated when other foods are either rejected or aggravate the illness. International Plasmon (Limited) have been quick to recognise this, and by incorporating plasmon with arrowroot, have added the proteid element which the carbohydrate lacks, without vitiating its soothing property. The new preparation is put up in tins, the $\frac{1}{3}$ -lb. one retailing at 9d. In some cases it would be advisable to have a Bermuda-arrowroot preparation of the same kind. Those who appreciate the true value of arrowroot never grudge to pay the price of the Bermuda kind.

THE "TABLOID" ASEPTIC HYPODERMIC CASE illustrated here is one of the latest that Messrs. Burroughs, Wellcome &



Co. have introduced. It is a trifle smaller than a cigarette-case, is nickel-plated, contains one of the all-glass syringes, and space for eight tubes of "Tabloid" hypodermic tablets.

SURGICAL SPECIALITIES of a useful nature come to us now and then from Messrs. Reynolds & Branson (Limited), Leeds. Thus a week or two ago we had a miniature vitriol carboy swivel, but instead of vitriol the bottle contained ethereal solution of soap, which every surgeon and nurse uses nowadays. The R. & B. arrangement enables them to keep the solution on the washstand, and to take out a few drops at a time without mess. The novelty that comes to us this week is called the "Sister Jane" support. It is for use in bandaging, &c., and consists of a white-enamelled metal pillar, upon which the heel of the leg to be bandaged is rested.



TO CORRESPONDENTS .- Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Price-protection.

SIR,—There are every day fresh proofs of the fact that, in our calling at least, in the near future, a system of price-protection in regard to proprietary-articles of all kinds will be almost universal. Several of the large manufacturers of various proprietary-articles have, within recent months, sent out circulars to chemists, intimating their intention to establish a system of private protection, and requesting customers to sign agreements. I have always looked on these private agreements as being absolutely worthless; and, holding this opinion, I have written to several manufacturers, asking them to give a reason for holding aloof from the P.A.T.A., which is now a generally recognised institution with well-defined powers. The answers are always courteous, and generally run somewhat in this way :- "We think our and generally run somewhat in this way:—"We think our customers will have more satisfaction in dealing directly with ourselves." "We hold a very high opinion of the P.A.T.A., and pledge ourselves to join it should a private effort fail." "We have not sufficient proof that our customers wish us to join the P.A.T.A.," &c. Now, we wish to be just as courteous to these men as they are to us; but as they are fighting for their own interests, and will not move a foot further forward to meet us than they feel to be to their advantage, we chemists must as firmly fight for our interests, and if we are united we can soon show which side is the stronger. There is no need for fighting, however, if these men could only get their eyes opened to see further into this problem. They are the timid souls of pharmacy. They are willing to protect if they could be quite sure that protection would help them, or at least not hinder them, and their reward is like to be the reward of all who are timid and weak in this world. The timid, fearing to stand still and fearing to take a strong line of action, select a middle course and invariably come to grief. These men are afraid that manufacturers who have joined the P.A.T.A. are reaping advantages over them on the one hand, whilst on the other they think that only those retailers who have joined the P.A.T.A. are favourable to the protection movement, and the insane cutter is really their best friend. The first suspicion is quite correct. I could mention at least one article which has in many districts practically cleaned all rivals out since joining the P.A.T.A. In the case of this article the P.A.T.A. has had a fair chance. In too many cases articles appearing on the P.A.T.A. list are such as never have had any great sale; but in this case the demand is universal. There are many other similar articles in the market of older standing, but the P.A.T.A. article is triumphant all along the line. The rivals have a suspicion of this, and well know the article to which I refer. These men are quite wrong if they think that only those who have joined the P.A.T.A. are in favour of protection. There are many mcn, both chemists and grocers, in all parts of the country who will never join the P.A.T.A. or take any active part in any public movement. who will yet push an article which affords a living profit, and discourage the sale of an article which affords no such profit. This is only according to common sense. To all such the P.A.T.A. published list is invaluable. There are few now who will be bold enough to cut below that list, and none who will venture to advertise below it. The private agreement is, however, quite a different thing. It cannot be so strictly observed, and is probably not meant to be. If these men are serious in their effort to protect, it would be far easier and cheaper for them to avail themselves of the machinery of the P.A.T.A., and far more effective.

Meanwhile, the only way in which chemists can kill our

list at cost-price, or even below, and, of course, selling them as seldom as possible. JAMES REID. Dumfries, March 23.

The Pharmacy Bill.

SIR, I object to your article "Unripe Fruit" of March 14, or, at least, that portion which criticises small minor details. In my opinion chemists should welcome the draft Pharmacy Bill, not only as an indication that there is a stir amongst the dry bones at Bloomsbury Square, but for the Bill itself. Undoubtedly holes can be made if not found, but why publish them? Internal dissension will be fatal now we are about to face our foes. Let us be united—at least I came to praise not to bury Cæsar. The registration of shops may cause some little inconvenience to some, but this will be far outweighed by the benefits. It will enable the Society to trace and prosecute unqualified traders (and these are many besides companies) who pirate our hard-earned rights. 'Open shop" might have been better defined; but this can be easily remedied when the Bill is in Committee or, as will most likely happen, gets before a Select Committee of the House. Supposing surgeons have to be registered and only qualified dispensers kept, it will be only justice. It may have the effect of a few more prescriptions finding their way to the long-suffering, defrauded chemist, and perhaps efface a few fourpenny doctors (i.e., three bottles of medicine and consultation for 1s.). If the demerits of the Bill are to be discussed, let it be in camera; indeed, I think it would be a good thing if the Council were to convene a meeting for that purpose. The time chosen for the introduction of the Bill is most opportune. It will give us a locus standi if, as a sequence of the Poisons Committee report, the Privy Council should introduce a Bill dealing with the question. Some arrangement may then be made which will make it, as it ought to be, a Government measure. In the meantime, every chemist in the land ought to feel it his bounden duty to himself, his fellow craftsmen, and the public to see, if possible, or write to his representative in Parliament, impressing upon him the importance of safeguarding those he represents (the public) from a reckless distribution of poisons by unqualified men. Let there be no thought of "troubling" members of Parliament—they are sent there for that express purpose and, if they do their duty, wish to be so troubled and expect it. The "do-nothing policy" of the past mnst be abandoned—we must be united, for, as you admit in your article in question, the "cardinal principles of the Bill are all right"—we must have no foes in our own household, even be they the "candid friend"—but work will win.

Yours faithfully, Dalston, April 1. J. C. PENTNEY.

SIR,—The Pharmacy Bill before the House will do no good unless it protects the registered chemist in his trade and title. I would like to offer two or three suggestions for consideration :-

1. Restoration of Preliminary examination, with English, Latin, arithmetic, including the metric system, but without Euclid or modern languages.

2. A bona-fide articled apprenticeship of not less than three years to a registered chemist, the indenture to be evidence of apprenticeship. This would be better than a mere certificate, covering, say, three years' dispensing in a surgery.

3. Division of the Minor examination. First day, similar to

the present—analysis and dispensing, the practical part. Second day, much as at present, leaving out the materia-medica map. In botany, the external characters, recognition of plants, and some classification.

The whole examination should be practical, and the knowledge required should be likely to be of use to the man in the shop in his every-day life. As it is, much knowledge is taken up for a short time, and laid down again as soon as the certificate is gained. I am not of opinion that a curriculum is necessary, for I know of young men who have been at a good school for perhaps two years but could not get through, while others who had read well and been a much shorter time succeeded.

4. Registration: As now, with registration of shops. 5. Licence. !

It might be well that chemists in business, and all bondfide managers of or the owners of each branch shop, should stores is by selling all proprietary articles not in the P.A.T.A. | pay an annual licensing-fee of, say, a guinea, payment of

which fee should constitute him a member of the Pharmaceutical Society, and the sale of all official drugs, preparations, or medicines should be confined to registered and licensed chemists. This would tend to the safety of the public, and would help to pay the chemist for some of the expense and trouble of his training.

Respectfully yours, AN OLD CHEMIST. (21/5.)

Stores and Assistants.

SIR,—I am quite aware that there are some chemists who conduct without assistance the class of business under discussion, but I think that "Contented Young Chemist" and "Esse quam Videre" rather lose sight of the point at issue in order to eulogise themselves. A chemist who is tied to his business from one year's end to another, and who does not even know what it is to have half-an-hour's recreation or a meal in peace, and is debarred from all kinds of social intercourse what-oever, is, to my miud, simply leading a wretched existence; and under such circumstances it is hardly to his credit to call himself "a contented chemist." It is hardly to be wondered at that so many qualified men fight shy of such a prospect and flock to the stores. Mr. Pickering would not only condemn men to lead such a life, but essays to prevent them from going to places where they at least have a certain amount of time to devote to their bodily welfare. To say nothing of the help of an intelligent errand-lad, whom we find somewhat of a rara avis, "Esse quam Videre" has advantages which many of us have notan early-closing day and short hours-sixty-six; the chemists in my locality have eighty-five, and no early-closing Yours, &c. day. LAST STRAW. (255/34.)

SIR,—There are a few replies in your issue of March 28 to my letter of March 14, but none refer to my remarks on wages, hours, &c. Why? Because they know that they are only too true. When I wrote about a certain prescription being dispensed at my shop—i.e., branch—for 10d., whereas an ordinary chemist charged 1s. 6d., I meant that the chemist, by so charging, stands in his own light, and drives his customers away. What does the public care, whether the manager of a store is a machine, and the manager (or owner) of a pharmacy is an individual, or not?

Yours faithfully, Another Stores Man. (2/38.)

SIR,—I have much pleasure in complying with your correspondent's wish, and append a copy of the agreement managers who accept engagements with some "Stores" are expected to sign. It speaks for itself.

Yours faithfully, C. E. PICKERING.

AN AGREEMENT made this day of BETWEEN and his successor, or successors for the time being as Managing Director for and on behalf of BOOTS CASH CHEMISTS EASTERN (LIMITED) on the one part, and Company agree to employ the said Company agree to employ the said. the said Company agree to employ the said said agrees to serve the said Company as Chemist's

Assistant on the conditions following, that is to say:—

(1) The said shows the said diligently and faithfully employ

himself to promote the interests of the said Company during business hours.

(2) The said (2) The said shall be entitled to eight days' holiday in each year in addition to all Bank and General Holidays.

(3) In consideration of his services to be rendered aforesaid the Company shall pay to the said such or other remuneration as may be agreed upon from time to time. In case the said shall absent himself from business for a whole day or any longer period at any one time, the said Company shall be at liberty on each such occasion to deduct a proportionate part of the week's salary as above mentioned, but such deduction shall not be construed as a waiver of the right reserved to them by Clause 5 hereinafter contained.

(4) The said shall not within three years after the expiration or sooner determination of leaving the service of the said Company carry on either alone or in connection with any other person the business of, or enter the service or employment of a Chemist and Druggist within three (3) miles of Nottingham, and in case of his doing so shall pay to the said Company the sum of 300t, as liquidated damages.

(5) Notwithstanding anything hereinbefore contained, either party shall be at liberty to determine the engagement hereby

created by giving to the other one month's notice in writing of his or their intention to do so. The said Company also reserve to themselves the right of summarily dismissing the said and of terminating this Agreeme t at any time without notice in case of misconduct or wilful neglect of duty on part of

(6) The said if required by the said Company to do so agrees to re sell to the Managing Director for the time being on leaving the said Company or at any time within twelve months after at prices then current (but at not less than par price) any shares of the said Company of which he is holder.

Witness, &c.

Indoor Situations.

SIR,—The indoor v. outdoor controversy in your muchappreciated paper recalls the promise I made myself, at the termination of my indoor apprenticeship, never to accept an indoor berth. My indoor experiences were, I hope, unique, for during the three years of my apprenticeship my existence was almost unendurable. The man to whom I was indentured was well blessed with this world's goods, and has held on several occasions high civic offices. His hours of business averaged eighty weekly, and after a few hours' freedom on Thursday afternoons I was on duty till the following Sunday morning. My night-duty, even in the depth of winter, was undertaken in a large, draughty, and poorly lit room without a fire. This was optional, but by far preferable to sitting at the extreme corner of the family sitting-room and being an unwilling listener to petty domestic quarrels which seemed never to end. Absolute silence was the unwritten law of apprentices and assistants during meals, taken at the family table, and which were as a rule "got through" in twelve minutes or less, if possible, owing to the existing family infelicity. This was, on occasions, emphatically demonstrated by the flourishing of a coffee-pot or water-jug in the near proximity of the head of-Yours truly, NEVER AGAIN. (254/32.)

Dispensing-arrangements in Hospitals.

SIR,-The excitement caused in Sheffield by the remarks of Mr. Connell, F.R C.S., on "dispensing chemists" has subsided; but all has not been said that might be. At the Royal Infirmary, of which institution Mr. Connell is at present consulting surgeon and was formerly for some time resident surgeon, the dispensing-arrangements are in the hands of a qualified dispenser, with an unqualified assistant. The latter assistant takes his share of the work of dispensing for the institution, and is, in the ordinary course, left in charge in the absence of his chief on half-days, &c. This does not fit well in with Mr. Connell's expressed opinions. The surprising fact is, however, that the arrangements at the Royal Infirmary are distinctly admirable when compared with those of the other chief voluntary institution -the Royal Hospital-where the dispenser is not a registered pharmaeist and his assistant is a youth. Thus we have at the two Royal institutions of an important industrial eentre like Sheffield four dispensers, only one of whom is a registered pharmacist. At the Branch Children's Hospital the dispensing is done by the medical officer, and the same applies to most of the rate-supported hospitals of Sheffieldthe Winter Street Fever-hospital, the Isolation Hospital at Lodge Moor, and the Ecclesall Bierlow Union Infirmary. The last named has been recently extended considerably. and is fondly believed in some local circles to be up to date. We are strong trade-unionists in Sheffield. What about this Consistency? (253/65)

The Possessive Case.

SIR,—I venture to make a remark on "Xrayser's" observations of the use of the possessive inflection. The words Sims, Pears, Stephens are all words of a plural form, and the possessive case plural is formed:

(a) By adding 's to the plural form of the noun if that does not end in s.

(b) By simply adding the apostrophe (') to the plural form where—as is usually the case—that ends in s; e.g., "the judges' remarks, Stephons' ink."

Also after a sibilant letter or sound the apostrophe is sometimes used without the inflection (i.e. the s) to mark the possessive singular—e.g., Thucydides' works; and perhaps we might include "Bass' stout" under this heading without greatly outraging the English language, although the inclination is to add the suffix or avoid the construction by using the noun with the preposition (of) before it. As "Xrayser" will remember, a tendency to simplify the inflectional system is prevalent in every Indo-European language, for which characteristic ours is specially noted, so that if "Xrayser" lived long enough the sight of a ('s) might become as objectionable to him as its absence is now.

Yours truly, THE BILL-POSTER. (7/31.)

Dispensing Notes.

Oil in Pills.

SIR,—Would you let us know how these pills should be compounded? We find that the ol. menth. pip. comes out while they are being massed:—

Ext. nucis vom.				gr. iij.
Ext. hyoscyami		•••		gr. vj.
Pulv. capsici	•••	•••	•••	gr. vj.
Aloin	•••	•••	•••	gr. vj.
Ol. menth. pip		•••	•••	mvj.
Ft. pil.				

Yours very faithfully, W. H. M. (227/71.)

[The addition of a few grains of powdered soap is all that is necessary to ensure satisfactory massing.]

218/14. Emulsio.—To mix equal volumes of maltine and cod-liver oil heat the mortar with boiling water, and stir in it the maltine until it is almost as fluid as the oil. Gradually add the latter, with constant stirring, and continue to stir until the mixture is cold.

Pepsin as a Pill-excipient.

SIR,—In making up the following I tried \(\frac{1}{4} \) gr. of powdered soap per pill, and found the mass rather soft:—

Acid. carbolic. gr. j.
Bismuth. subnit. gr. iv.
Ext. nuc. vom. gr. \(\frac{1}{4}\)

I had just before been making some pepsin-pills, and the thought struck me to try a little pepsin. I therefore used powdered ext. nuc. vom. and $\frac{1}{4}$ gr. of Armour's insoluble pepsin in each pill, and the result was splendid. I used nothing else; they massed easily to a nice consistence, and kept quite firm, even after standing exposed all night.

Yours sincerely, W. G. BOYD.

Dispensing Dutiable Tablets.

SIR,—
Antikamnia tabs. gr. v.
Mitte xxv.

One to be taken, &c.

Should this prescription be sent out bearing a patent-medicine stamp or not? Antikamnia tablets are supplied to the trade unstamped, and the box bears a label as follows:—

... the contents must be used *only* as an ingredient in the prescription . . . should any part of the contents be sold otherwise than as a component part of a medicine prepared in accordance with a prescription, &c., penalties, &c.

I should be glad to have your opinion, as I cannot obtain any satisfactory advice from the agents.

Yours truly, Curio (London). (244/48.)

[The tablets must be stamped according to the charge made for them. It is only in cases where dutiable articles are mixed with something else that they become entirely free from stamp-duty on dispensing. See The Chemists' and Druggists' Diary, page 531.]

1/62. Conium.—There is no vapor conii T.H.P. In the circumstances the old B.P. vapor. might be dispensed.

Miscellaneous Inquiries.

260/27. B. H.—You must tell us what are the ingredients of the hair-wash before we can answer your question.

- 1/48. Numa.—Hair-dye.—See C. & D., August 30, 1902, page 401.
- 1/23. Rhei.—The darkening of brown leather by means of spirit is permanent. If a small patch of the bag is stained, the best way is to treat the whole of the bag with spirit, and so make the colour the same all over.
- 250/64. J. E. H. L.—Motor-oil is a mineral oil used for lubricating. The oil does not require to be too thin.
- 6/52 H. S. C.—Bleaching Sponge.—See C. & D., October 4, 1902, page 601.
- 7/66. Salol.—Refer to the Educational Number of the C. § D, which was published on September 6, 1902.
- 246/10. Dominus.—Your query as to "staining mahoganised fittings green without spoiling gold labels thereon" is not clear. To begin with, the wood would have to be cleaned of the mahogany-stain by means of sandpaper, and this would endanger the gold labels.
- 5/4. Fresco.—The lavender-water contains civet and bergamot, but no musk. You will have to experiment to exactly match the sample you send, as analysis is useless in such a case.
- 8/36. W. R.—(1) Probably there was a little spirit of nitrous ether in your sample. Ethyl nitrite helps in the development of the colour of hydroquinene hair-dyes. (2) Thanks for your suggestion, but your surmise is wrong.

255/58. T. C. H.—Mist. Bismuthi Co.—The B.P.C. formula is suitable for your requirements:—

Morph. mur			•••	gr. viij.	,
Tr card. co				žiij.	
Chloroformi				mlxx.	15
Ext. nuc. vom. liq.				mcxxxv.	1
		•••		3v. mxx.	
Liq. bismuthi conc.				3xv.	
A ~ 7				žxx.	
114. desp. ad	•••	•••	•••	JAA	•

Dose: 20 to 30 minims.

Liq. Bismuthi Conc. is made from bismuth. subnit. 1 oz., ac. nitrici 5 oz., ac. citrici 5 oz., sodii bicarb. $8\frac{3}{4}$ oz., liq. ammon. 6 oz., liq. ammon. cit. 12 oz., aquæ q.s. Preduct, 50 oz. The working details will be found in "Pharmacentical Formulas."

248/30. Pyro.—Anything you could add to printers' ink to cause it to dry more rapidly would thin it too much. The orying-properties of the ink are regulated in the manufacture.

7/59. G. J. G.—Cheap Varnish for mineral-water boxes can be made from the following formula:—

		0				4
Shellac	•••	•••	•••	•••	žviij.	٠,
Benzoin	•••		•••		žiss.	+
Resin	•••		•••	•••	Зііј.	
Gamboge	• • •			•••	3ss.	١.
Spirit			•••	•••	Oij.	
issolve.						:

7/44. L. P. S. I.—The first step in securing the appointment of chemist to the King or the Lord Lieutenant of Ireland cannot be taken until in the ordinary way of business you supply either of them, or departments of their households, with goods. Then application has to be made to the Board of Green Cloth (in the case of the King), or to the Castle, for the usual warrant. This application should be supported by two or more persons of good position who are personally known to the King or the Lord Lieutenant. The appointments are purely honorary.

Information Wanted.

- 2/13. Who supplies advertising picture-postcards!
- 9/52. Who are the importers of the "Magnus" or "Magnet" brand eucalyptus oil?

Westminster Wisdom.

(From our Parliamentary Representative.)

THE PHARMACY BILL.

This measure, so far as Parliament is concerned, remains in the position in which I left it last week. At present it stands first among private members' Bills for Monday, May 11; but there is no advant-ge attaching to precedence on that date, because it will be reserved for Government business. No members, except the two I previously mentioned—Mr. James Bailey and Mr. Gilhooly—have thought it worth while to give notice of opposition.

INCOME-TAX.

The Chancellor of the Exchequer has made the interesting statement that the virtual rate of income-tax in the year 1902-3, after allowing for the effect of the several abatements, was: For persons with incomes of 2001., 3d. in the pound; 300l., 7d.; 400l., 9d.; 500l., $10\frac{1}{3}d.$; 600l., 1s.

THE SUGAR CONVENTION.

Mr. Gerald Balfour has given notice, for a date not yet fixed, of the Government's Bill to enable his Majesty to carry into effect the Sugar Convention signed on March 5. In view of this a White Paper containing official correspondence on the subject, and dealing specially with the attitude of Great Britain, was circulated on Tuesday night.

Huddersfield Chemists' Association.

MEETING was held at the Y.M.C.A. rooms on Tucsday A evening, April 7, Mr. R. C. Walshaw in the chair.

Letters regarding Mr. Currie's candidature and from the Federation (see C. & D., April 4) were read, and in con-

Poisons Committee's Report,

nection with the

the President explained that he had communicated with Mr. Calvert, a member of their Association in the Colne division. Mr. Calvert wrote to Sir James Kitson, the member for the division, asking him to grant an interview with some members of the Association. Sir James replied that he would not be in the division until the Easter recess, but he had communicated with Sir James Woodhouse, the member for the Huddersfield division, and it was suggested that the two gentlemen should together meet a deputation of the Huddersfield Association. He (the President) had arranged that Mr. Calvert, Mr. Needham, and himself should wait upon these gentlemen. If the Huddersfield Association thought it advisable to add a fourth gentleman, someone else might be nominated. Mr. Broadbert proposed that Mr. Stephens, who was in the Colne Valley, should be added, and, the motion having been seconded by Mr. Spurr, the deputation was increased to four.

THE COUNCIL ELECTION.

After a conversation in regard to the forthcoming election of the Pharmaceutical Cauncil, it was resolved:-

That before each election the Federation of Local Pharmaceutical Associations should send to each affiliated Association a list of the candidates for election, and state against each name whether or not the said candidate adopts and supports the principle of the protection of prices.

It was stated that the resolution should stand in the name of Huddersfield at the Federation Conference at Bristol.

The CHAIRMAN said that in his candidature he made a special point of the desirability that the Council should assert the interests of the chemists in anything and everything. It had been said that they were a trade union, and he would advocate that they should make that title effective, not on labour lines, but by protecting their interests wherever possible,

The President then vacated the chair in favour of Mr. Stephens, who called upon Mr. Walshaw to give an epitome of his address as a eandidate, after which, on the motion of Mr. Spurr, seconded by Mr. NEEDHAM, it was resolved that the Association should support Mr. Walshaw.

Mr. Walshaw thanked the members for their confidence. He was then called upon to withdraw while the meeting, resolved into committee, deliberated upon a plan of campaign.

Coming Events.

Secretaries should send us notices by Wednesday of each week.

Wednesday, April 15.

Western Chemists' Association, Norfolk Square Hotel, London Street, Paddington, W. at 9 P.M. Smoking-concert.

Edinburgh Chemists', Assistants', and Apprentices' Association.

Visit to the Inveresk Paper-mill. Members will meet at the Musselburgh train, which leaves the Waverley Station at 8.30 р.м.

Thursday, April 16.

Pharmaceutical Society of Great Britain (North British Branch), 36 York Place, Edinburgh, at 11.30 a.m. Papers to be read: "Liquor Arsenii et Hydrargyri Iodidi, B.P.," by Mr. William Duncan, F.C.S.; note on "The Location of Salicin in Willow-bark," by Mr. David Brown, F.I.C., F.R.S.E.; note on "Compound Tincture of Gentian," by Mr. Peter Boa. At 1 o'clock an adjournment will take place for luncheon, and at 2 p.m. there will be a private conference on the Pharmacy Acts A mendment Bill. 1903.

the Pharmacy Acts Amendment Bill, 1903.

Lincoln Chemists' Association, at 8 p.m. Ordinary meeting, at which the Council election will be discussed.

North Staffordshire Chemists' Association, Grand Hotel, Hanley, at 5 o'clock. Annual dinner. The annual meeting will be held at 3.30.

Glasgow Pharmaceutical Association, 94 West Regent Street, at 9 p.m. Mr. T. Maben will give a lantern lecture on "A British Pharmacist in America."

CHANGE OF NAME.—The Agra Medical Hall and Co. operative Association (Limited), lately Messrs. A. John & Co., is now called "The Agra Co-operative Stores (Limited)."

SOAP AND QUININE.—Mr. R. L. Malcolm, representing Messrs. Colgate & Co., New York, was in Bombay when the mail left.—A representative from Messrs. Howards & Sons, of Stratford, England, was in Calcutta early in March.

INCREASING CAPITAL.—A meeting of the stockholders of Messrs. Parke, Davis & Co. was held at Detroit on March 31 to consider a proposition for the increase of capitalisation. The present capital stock of the company is \$1,600.000, and there is a surplus in the treasury of \$2,500,000. The plan contemplates a stock dividend of \$1,600,000, or 100 per cent., and sale among stockholders, pro rata, according to their holdings, of \$800,000 worth of stock. This will give a new capitalisation of \$4,000,000, and still leave over \$800,000 in the surplus fund. The stock sold to present stockholders will be at par—\$25 a share.

SAD DEATH OF A WEST-END CHEMIST.—On Wednesday, April 8, at the Chelsea Town Hall, Mr. Ingleby Oddie, Deputy-Coroner, held an inquiry with reference to the death of Mr. Charles William Bridges (61), a pharmaceutical chemist, for thirty years carrying on business at 24 Sloane Street, Knightsbridge. The evidence of a sister of deceased showed that he had been in a weak state of health for some time, and had been worried and depressed by reason of his wife being confined in an asylum. He was in no financial trouble. On Saturday he was medically treated for a stomachic trouble, accompanied by great pain, and he had the idea he would not get over it. On Sunday morning, when the doctor arrived he found him unconscious and dying. He died soon afterwards. There was a distinct smell of prussic acid in the room, and on the chest of drawers by his side was a bottle of B.P. hydrocyanie acid half empty. Percy Leek, an assistant at the shop, had no doubt that deceased took the bottle from the poison-cupboard during the night. Dr. Wm. J. Frankish, of Sloane Street, said the deceased was an old friend. There was no doubt that death was due to prussic-acid poisoning. The jury returned a verdict of suicide whilst of unsound mind.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted ...

42 Cannon Street, London, E.C.: April 8.

HOLIDAY feeling characterises the markets this week, and the changes in value are mostly of a minor character. Quinine has undergone a slight reduction in makers' hands, as the result of cheaper prices for bark, and prices in second-hands are also easier. Tartaric acid is firmer and tending upwards, and peppermint oil is rather better since the sales "without reserve" last week. French lavender oil is a rising market, owing to scarcity. Buchuleaves have been in good demand since the auctions, and all the first-hand parcels have been cleared. The following are the principal changes since our last report:-

Higher	Firmer	Lower		
Buchu Cocoa-butter Galls (Chinese) Ginger (Jamaica) Shellac Ziuc-salts	Acid, tartaric Ipecacuanha (Cartagena) Oil, aniseed, star Oil, lavender Oil, peppermint (Amer. HGH)	Quinine	**	

A Quarter's Trade.

British trade in March was exceptionally good, both imports and exports showing the substantial increases of 6,000,0007, and 2,891,0007. respectively. For the three months there is an improvement of 924,7007, in imports, and practically 5,000,0007, in exports, as compared with the corresponding period of last year. The imports of chemicals, drugs, dyes, and colours during March increased by 40,000%, but for the quarter there is a decrease of 70,000% odd. The month's exports of similar goods improved by 173,100% on a total of 1,203,700%, and for the three months there is an increase of 388,300%, the actual amount exported being 3,228,7001. March appears to have been an excellent business month for the export of chemicals so far as regards quantity, and some of the figures point to considerable activity in the United States, especially as regards bleaching materials, about 80,000 cwt. being shipped to that country during March, and 221,350 cwt. for the three months. Although the latter figures represent an increase of 44,770 cwt as compared with the first quarter of 1902, values have declined by 19,000%, which testifies that the British chemical manufacturer is determined to hold his own in spite of the fact that competition for export has in many cases created record low figures. British makers of bleach are evidently pursuing the American policy of exporting at practically no profit, hoping to recoup themselves on the home market. The exports of sodacompounds exhibit an all-round improvement, a marked increase being shown in caustic soda and sulphate of soda. The exports of drugs and medicinal preparations continue to expand, the total for the quarter being 349,200l., or 21,000l. more than the corresponding period of 1:02; the quiniue figures are dealt with on page 634.

American Bromides.

Up to the present the situation is unchanged, and it is very difficult to obtain inside information. So far as is known, the only firm manufacturing in United States at present is the Dow Chemical Company, of Midland, Mich. This firm holds a patent on a method of purifying the crude bromine, and is making a superior article to the average American bromide salt. Considerable difficulty is experienced in obtaining supplies of brominc since the collapse of the American salt trust, and the pool has not resumed active operations. Supplies are being shipped to Englaud from several sources, but only in small lots, and dealers in New York are selling German bromide in single-case lots only It is still impossible to obtain any large parcels.

Java Quinine-exports.

The exports from Java during January amounted to 178 cases, of which 163 cases were shipped to New York, 6 cases to Japan, and 4 cases to Genoa. During the corresponding month of 1902, 1901, and 1900, 200 cases, 184 cases, and 352 cases respectively were shipped.

Sicilian Sulphur.

In reviewing the market situation during March, a Messina report states that two Norwegian pulp-factories-the Hassland Pulp Company and the Kellner-Partington Paper pulp Company, of Sannesund—have changed their plants, and will henceforward burn pyrites only. This may induce others, who are hesitating, to follow their example, and, if so, the consumption of Sicillan brimstone will be materially affected. Speculation has entirely ceased, and, as it is expected that prices will eventually fall, there is little inducement to buy. The stocks at Girgenti decreased to 120,800 tons at the end of February against 138,00° tons in 1902. The tons at the end of February against 138,00° tons in 1902. The following are the current quotations: Best unmixed seconds, in bulk, 82s. 9d.; best thirds, 79s. 6d.; current thirds, 78s. 6d; refined block sulphur, 87s. 9d. per ton of 13 Siciliau cantars, f.o.b. Refiued block, in bags, 91s. 5d.; refined roll, in bags, 94s. 5d. ditto, in 3-cwt. casks and 50-kilo. cases, 96s. 9d.; usual sticks 103s. 6d.; small sticks, 105s. 6d. Sublimed flowers, pure, 108s. current ditto, 97s. 5d.; and commercial ditto, 94s. 9d. per ton of 20 cwt., f.o.b. Messina.

Heavy Chemicals.

With the approaching holidays the tone of the heavy-chemical market is somewhat quieter. Nevertheless the general demand both on home and export account keeps very fair. Values show little or no fluctuation and are mostly firm.

SULPHATE OF AMMONIA.—The quieter tone continues, but the position is still a strong one, and late quotations are fully maintained.

CALCIUM CHLORIDE continues to move freely, at unchanged figures of 57s. 6d. to 60s. per ton, f.o.b.

PEARL-HARDENING is in better request, particularly on home-ecount. Value remains unaltered at 60s to 65s, per ton free on account. rails, or free on board in usual casks.

MAGNESIUM SALTS in steady consumptive request at uuchanged figures. Chloride, 62s. 6d. to 67s. 6d. per ton. Magnesium sulphate (Epsoms), 62s. 6d to 65s. per ton. Carbonate of magnesia, 37s. 6d. to 40s. per cwt.

SULPHOCYANIDES are neglected and values have scarcely been maintained. Nominal figures potassium, $7\frac{1}{4}d$. to $7\frac{1}{2}d$. per lb. Ammonium, 95 per cent, $6\frac{1}{4}d$. to $6\frac{3}{8}d$. per lb. Barium, 95 per cent., $3\frac{5}{8}d$. to $3\frac{3}{4}d$. per lb.

RECOVERED SULPHUR, with steady demand and some scarcity, is well maintained, at 5l. 5s. to 5l. 10s. per ton in bags, free ou

Zinc Salts have improved, and with better request higher figures are likely to continue. Zinc-sulphate crystals, 6l. to 6l. 5s. per ton. Zinc-chloride solution, 100° Tw., 6l. to 6l. 5s. per ton.

Liverpool Drug-market.

Leverpool, April 7. Castor Oil.—The market is unchanged, at $2\frac{3}{8}d$, to $2\frac{7}{16}d$, for good seconds Calcutta. First-pressure Freuch is selling slowly at $2\frac{3}{5}d$, and second-pressure at $2\frac{5}{16}d$, per lb. Gum Acacia.—The volume of business is still limited, but there

are rumours that prices of Soudan sorts have advanced consider-

ably at Khartoum, Alexandria, and Cairo Turpentine.—Steady, at 44s. 6d. to 45s. per cwt.

QUILLAIA-BARK has improved in position during the week, and good merchantable is now held for 181. per ton.

Honey (Chillan).—Twenty-seven barrels of ordinary Pile X. are reported sold at 27s. per cwt.

GINGER (AFRICAN) has advanced in value, and sales have been made from the quay at 29s per cwt; 101 bags of Cochin, just landed, are reported sold at 37s. per cwt.

TURMERIC.—Seventy seven bags of Cochin finger, ordinary quality, have been sold at 9s. 6d. per cwt.

BEESWAX.—Six bags of Sierra Leone in store have realised 6l. 15s. Chilian ranges in value from 7l. 10s. to 8l. 10s. per cwt., with little havingers ressin.

with little business passing.

Calabar Beans.—Several arrivals have taken place and have been offered at auction, but no bids were forthcoming; 7d. per lb. is still asked by importers.

American Drug-market.

New York, March 24.

Business continues brisk, with an absence of any discouraging features, and every indication of further improvement. ACID, CITRIC, has been advanced 2c., and manufacturers now

quote at 33c., in barrels.

Aloes.—Demand for all varieties is slow, and 12c. will now buy Cape. Curação is easy, at 3½c. to 4c. per lb.

CANNABIS INDICA continues firm, and 85c. is now the inside figure, with the larger holders asking 88c. to 90c., according to

quantity and quality.

Buchu.—Short is easier, owing to arrivals of new crop, and 23c.

is a nominal quotation. Long are scarce, at \$1.50.

Cod-Liver Oil continues upward, and quotations run from \$1 to \$1.10. Small sales have been made at \$90 and \$95 per barrel.

GOLDEN SEAL is selling in a small way at 52c. to 54c. per lb. IPECACUANHA.—Rio is without much demand, and offering at \$1.40. Cartagena is quoted at \$1 to \$1.05.

JALAF is moving slowly, at 9½c. to 10c. per lb. JAPAN WAX is higher, at 15c., with little offered.

MENTHOL is in very limited inquiry, and has sold at \$6.25 per lb. The market is a little firmer, but this figure will still buy. OIL OF PEPPERMINT.—Demand is almost nil, and the market easy at \$3.50.

Opium is quiet, but firm, at \$3 per lb.
Quining.—The manufacturing demand is good, with Java selling at 24 c. to 25c, and German at 26 c. to 27c. per oz.

German Drug Market.

Hamburg, April 6

Our drug-market is quiet, owing to the approach of the Easter holidays.

AGAR-AGAR continues very firm; prime held at 330m. and current at 290m. per 100 kilos.

CASCARA SAGRADA for spot-delivery is firm at 100m. to 105m. per 100 kilos., while forward is lower at 75m. per 100 kilos.

CONDURANGO is quiet and lower at 85m. per 100 kilos. Kola is scarce and firm at from 85m. to 100m. per 100 kilos.

CEVADILLA SEED is firm at 100m; per 100 kilos.

CUMIN-SEED.—Maltese is quoted 44m., and Mogadore 40m.

ERGOT is quiet at 270m, to 260m, per 100 kilos.

IPECACUANHA is quiet at 13½m. for Rio, and 9½m. per kilo. for Cartagena.

LYCOPODIUM is firm at 465m. to 470m. per 100 kilos.

Senega is quoted $8\frac{1}{4}$ m. to $8\frac{1}{2}$ m. per kilo. Sugar-of milk is firmer at 100m. per 100 kilos.

WAX (JAPANESE) is still rising, 135m. per 100 kilos. being asked.
WORM-SEED is scarce and firm at 100m. per 100 kilos.

Oils (Fixed).—Castor is very cheap at present, first-pressing, in barrels, being quoted at 42m. to 41½m. per 100 kilos. for forward delivery. Cod-liver is very firm and scarce. Linseed, for spot delivery, firm; forward delivery is neglected. Cotton, dull. Rape, quiet. Chinese wood, firm at 49m. per 100 kilos.

OILS (ESSENTIAL) are without material change.

Cablegram.

Hamburg, April 8:—Santonin has been advanced to 49m. per kilo. Cevadilla-seed is quoted 120m. per 100 kilos., and Japanese wax is firmer.

ACID, CITRIC, remains easy, at from 1s. $1\frac{3}{4}d$. to 1s. 2d. per lb.

ACID, TARTARIC, is firmer, and in fair demand. English is now quoted 1s. 1d. and foreign 1s. $0\frac{1}{2}d$. per 1b.

ALMONDS.—Prospects for the crop in Sicily are good, and so far the frost and cold have not done any material injury. P. & G. sweet is quoted 60s. 6d.; bitter, 68s.; current Avola, 69s. 9d.; choice Avola, 81s. per cwt. of $50\frac{3}{4}$ kilos., f.o.b. Messina, prompt shipment.

Aniseed.—The exports from Thessaly during amounted to 258 cwt. (2321.), against 1,827 cwt. (1,6451.) in

ARROWROOT has been in rather more demand at $2\frac{1}{4}d$. per lb. for ordinary to good manufacturing St. Vincent.

ARSENIC.—As a result of the combination between the English producers, it is said that an advance of 30 per cent. to 40 per cent. may be expected.

Benzoin.—Good Sumatra seconds have been sold since the auctions at from 7l. to 7l. 2s. 6d. per cwt.

Buchu.—The parcels offered at auction last week have since been sold at from $8\frac{1}{4}d$, to 9d, per lb., principally for export to U.S.A. The market is now temporarily bare.

CALABAR BEANS.—A small sale is reported in Liverpool at 7d. per lb.

CASCARA SAGRADA.—A small quantity has changed hands in one quarter at 50s. per cwt. A London report says: "The demand is fair, and we think there is a 'bear' movement to pick up all offering a little later."

CHAMOMILES are steady Good No. 1 Belgian are quoted 40s, per cwt, c.i.f., and higher prices are expected for this grade. Common qualities are easy.

CHILLIES.—Sales of Bombay are reported in Liverpool at 16s. 6d. to 20s. per cwt. on the quay.

CIVET .- The export of civet from the Somaliland Protectorate during the year ending March 31, 1902, shows the considerable decrease of 1,03,901r. The figures are as follows :--

1899-1900 2484 1900-01 1901-02 Lbs. ... 1,420 ... 24,825 35,275 1,39,176 Rs.

Civet is passed through Zaila, the chief port on the Somaliland coast, duty free. The decline in the export is probably due to competition with the French railway, and the consequent deflection of the Zaila trace to Jibouti.

CLOVES.—An inactive market with sellers of March-May delivery at 33d. per lb.

COCOA BUTTER.—In auct on, 100 tons Cadbury's sold at $10\frac{1}{2}d$. to $10\frac{1}{4}d$. per lb., closing at 11d.; five cases of 3 oz. tablets sold at 1s. $1\frac{1}{2}d$.

ETHERS.—The following are the current quotations: B.P. pure, sp. gr. 0.735, 4s. 9d. per 1b.; 0.720, 5s. 5d.; and 0.750, 4s. 7d. Methylated, 0.750, $8\frac{1}{4}d$.; 0.735, $8\frac{1}{2}d$.; 0.725, $10\frac{1}{3}d$.; 0.725 (triple rectified), 1s. $3\frac{1}{4}d$.; 0.720, 1s. $0\frac{1}{2}d$.; 0.717, 1s. 4d. per lb.

GAMBIER.—Cubes are very scarce on the spot, with offers near at hand at 41s. per cwt.

GINGER.—Japanese has been sold in ton lots at 24s., c.i.f., for January-March shipment. In auction 513 barrels Jamaica sold at steady prices to 1s. to 2s. advance for the better qualities. Very bold brought 66s., fine 62s. 6d., good washed 50s. to 56s. 6d., medium duil to washed 43s. to 48s. 6d., ordinary dutlish 41s, to 42s. 6d., and common to ordinary 39s, to 418.

GUM ARABIC.—At auction on Tuesday 700 odd packages were offered, and partly sold at easy prices. Of 250 packages East Indian offered, about 130 sold, chiefly Karachi Amrad, including good pale bold at 25s., small ambery sorts 22s. 6d. to 23s., pickings 17s. to 17s. 6d., common dark 10s. 6d., pale dusty siftings 16s. 6d., ordinary dusty 12s.; good palish Ghatti 25s., partly blocky 20s. Madras, hard glassy mixed 16s., block 9s. Of Aden gum, 185 packages offered, of which 30 sold, reddish and brownish sorts, 'without reserve," at 17s., and dusty siftings at 11s. Of 11 bags Instralian offered, 9 sold at 14s. to 15s. per cwt. for dark glassy. Good pale soft Soudan sorts were bought in at 36s. per cwt.

The exports from Zaila, Somaliland, during 1901-02 amounted to 457 cwt, against 753 cwt in 1900-01 and 1,023 cwt in 1899-1900. The expotts of "gums and resins" from Berbera and Bulhar, Somanland, increased in weight by 409 cwt, but declined in value by 921r. This was due to the reduction in the tariff value and the larger export of "coarse gum," the cheapest descriptions of the coarse gum, and the larger export of "coarse gum," the cheapest descriptions of the coarse gum, and the larger export of "coarse gum," the cheapest descriptions of the coarse gum, and the gum and the larger export of "coarse gum," the cheapest descriptions of the gum and the larger export of "coarse gum," the cheapest descriptions of the gum and the larger exports of the gum and the gum and the larger exports of the gum and the gum and the larger exports of the gum and the tion. The necessities of the people stimulated them to collect and sell this natural substance, otherwise the amount would have been much below last year's supply, because the dealers combine to fix inadequate prices. Kafilahs from Ogađen and Harrar brought larger quantities than the previous year to Bulhar, whence 3,337 cwt. was shipped, compared with 2,196 cwt., an increase of 1,141 cwt. The entire exports from both ports were carried to Aden.

IPECACUANHA.—Since the auctions there has been a fair demand for both descriptions, Rio having sold at from 5s. 1d. to 5s. 2d. per lb., and Cartagena at 3s. 10d. per lb., 4s. being asked in one instance.

OIL, Cod-Liver. - Most of the agents continue without offers of new oil, but one or two others ask from 460s. to 475s. per barrel, c.i.f., and in one instance 500s. is still quoted. Old oil has been sold on the spot at 445s., prices ranging from 440s. to 450s., according to brand and holder. Wholesale druggists have advanced their prices to 24s, per gal. Our Bergen correspondent writes on April 4 that the weather this week has been rather favourable to the fishing. The condition of the cod and liver remains much the same as previously reported, and an improvement in the figures relating to the catch will give but a slight advance in the oil production. Apparently the price of cod-liver oil has touched the top and speculators are not so keen, added to

which the demand for consumption is very small at present-Finest non-congealing medicinal oil is offering at 450s, per barrel, f.o.b. Bergen. The exports from Bergen to date amount to $716\frac{1}{2}$ barrels, against $2.837\frac{1}{2}$ barrels at the same time last year.

OIL, EUCALYPTUS.—Quotations range from 1s. $1\frac{1}{2}d$. to 1s. 2d. per lb., and a few cases of B.P. quality have been placed at the lower figure.

OIL, LAVENDER.—There has been a fair demand for French, and prices are firmer. Best *Mont Blane* is quoted 7s. 4d. to 7s. 6d. per lb., c.i.f. terms, and several of the usual sources are without offers.

OIL, OLIVE.—A Messina report, dated March 31, states that, owing to Spain being the cheaper market at present, Sicily is unable to compete. The following are the current quotations: Yellow Messina, 33l.; green Messina, 32l.; Gallipoli, 34l. 10s.; choice Gallipoli, 35l. 5s.; and burning Russia, 37l. 15s. per tun of 1,045 kilos., f.o.b. Messina.

OIL, PEPPERMINT.—Since the sales "without reserve" the market has been steadier, and at the end of last week a small business was done in American H.G.H. at 14s, 6\%\textit{\ell}, per lb. spot, and 15s. is now asked by some holders. Japanese dementholised is now quoted 8s. 3d. to 8s. 6\%\textit{\ell}, business having been done at the lower figure. So-called Wayne County is quoted 13s. 6\%\textit{\ell}, down to 10s. 6\%\textit{\ell}, spot.

OIL, STAR-ANISEED.—Holders are now asking 4s. per lb., as the cheap parcels lately offering have been cleared off the market.

OIL, WOOD.—Small spot sales of Chinese are reported at $25s.\ 6d.$ per cwt.

OPIUM.—There is a much better demand this week, and the business done includes 30 cases Salonica at 10s. and 20 cases Tokat at 10s. per lb., spot. Smyrna and Constantinople druggists is quoted 8s. 3d. to 8s. 6d., and good Persian 9s. 3d. to 9s. 6d., spot. Holders are firm generally.

SMYRNA, April 2.—Opium has been very quiet, sales amounting to 17 cases Karahissar t.q. at 8s. 2d., and 2 cases current Yerli t.q. at 8s. 5d. per lb., c.i.f. The spring sowings are being carried out under favourable conditions, and from all parts we learn that farmers are doing their best to make up for the loss. Any how, we must have a cool, fresh time, with a fair amount of rain, until May, in order that these sowings should succeed. The arrivals in Smyrna amount to 5,139 cases, against 3,273 cases at the same time last year.

OTTO OF ROSE.—Official statistics regarding the exports of otto of rose from Bulgaria show that during 1902, 3,676 kilos., valued at 2,609,159f., were shipped, a gainst 3,027 kilos., valued at 2,140.588f., in 1901, or an increase of 649 kilos. An analysis of the exports during December shows that 227 kilos. were exported, valued at 6,000l. Of this quantity Austria took 5 kilos., England 22; Germany 29; Turkey 6, and France 145 kilos. As a result of the meeting of the rose producers at Karlovo last year, it is said the following propositions have been made and accepted by the Government, and have therefore become law:—The export of rosebushes to be forbidden; certificated scales, weights, and thermometers to be kept by the community; all buying agents to be duly authorised, and all packages to have Custom-house marks for identification.

QUILLAIA.—Chilian has changed hands in Liverpool in ton lots at 17l. per ton.

QUININE.—The manufacturers reduced their prices $\frac{1}{2}d$. per oz. on Monday, and now quote $1s.\ 1\frac{1}{2}d$. per oz. for German sulphate in bulk. Howards' price for sulphate is unchanged, and Whiffen's has been reduced by $\frac{1}{2}d$. P. & G. (French) is now $1s.\ 1d$. in bulk. The prices of quinine salts have also been revised. In second hands the market has been flat and prices easier, but the tone was rather better at the close, spot selling in a small way at 1s. per oz.

Judging from the Board of Trade returns, March, 1903, showed

Judging from the Board of Trade returns, March, 1903, showed considerably more activity in quinine and quinine-salts than was the ease in March, 1902, both the imports and exports showing an increase. The figures (representing ounces) are as follows:—

	$_{In}$	iports.	
		1902	1903
March	•••	- 8,830	43,68
January-March	•••	60,906	105,47

	E	xports.		
		1902	1903	
March	•••	37,137	90,829 British	
January-March	•••	130,130	199,656 make	
March	•••	21,927	54,142) Foreign	
January-March	•••	55,727	128,043 make	

The Amsterdam quinine-works have lowered their prices by 1fl. and 1.50fl. per kilo., and now quote Ed. II. at 23½fl., and Ed. III. 28fl. per kilo.

SENNA.—There has been a fair demand for Tinnevelly leaf since the auctions, and stocks are getting into smaller compass.

SHELLAC.—The spot market has been firm but quietly steady, holders quoting from 114s. to 120s. per cwt. for common to fine TN.; moderate sales have been made on the basis of 116s. to 117s. for fair. Fine orange marks continue scarce and command previous prices. A.C. Garnet is steady at 111s. for free, and 103s. to 104s. for blocky on the spot. "Futures" were an inactive market up to Tuesday, when prices advanced 2s. 6d., with sales amounting to over 2500 cases. At auction 135 chests second orange were bought in at from 116s. to 120s. for livery to fair; 226 chests button were also bought in at 135s. to 140s. for fine firsts, and 130s. to 137s. 6d. for circle seconds.

VALERIAN.—Foreign is quoted 18s. to 19s., c.i.f.

London Drug Statistics.

The following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of March, 1903, and to the stocks on March 31.

	March		S	Stocks		1903	
	Landed	Delivd	. 1903	1902	Imprtd	Delivd.	
Aloescs, &c.	98	193	1,238	1,238	509	751	
Aniseed, star cs Arrowrootbrls	1,105	1,333	13,074		4,438	3,588	
Balsams" bxs & tins	20 297	56 2 3	1,313 773	744	120 370	220	
Calumba bgs Cardamoms cs, &c.	631	30 551	1,410 2,108		1,600	46 1,417	
Cinchona pkgs Cochineal bgs	710 56	2,675 60	6,045 680	9,882 1,055	2,588 67	4,579 158	
Cubebs ,, Dragon's-blood cs	101 27	21	1,330	1,301	101 71	14 57	
Galls pkgs	247	85 5	5,363	8,412	1,399	2,481	
Ammoniacum ,, Animi ,,	194	98	572		§ 405	336	
Copal ,, Arabic ,,	9.781 1,236	4,250 2,221	26,692 J 9,265	15,646	12,634 6,492	13,859 5,971	
Asafetida ,, Benzoin ,,	385	67 237	589 1,623	1,005 1,131	1,303	139 740	
Damar ,, Galbanum ,,	355	240	2,803	2,822	1,277	699	
Gamboge ,, Guaiacum ,,	68	8 184	36 58 625	1,539	26 8 501	32 17	
Kauri tons Kinopkgs Mastich	2	8	146 20	167	17	588 28 5	
Myrrh, E.I ,,	23 450	35 516	106 1,904	134 2,792	95 1,948	57 1,031	
Sandarae ,,	248 1,338	60 1,445	1,454 3,541	1,311 5,046	406 4,137	505 2.962	
Ipecacuanha, Rio bls ,, other kinds	21	61 32	466 257	478 451	64	163 156	
Jalap	=	4	103	130 51	10	9 55	
Oils— *Aniseed, star cs	10	168	814	865	275	226	
*Cassia, Cocoa-nuttons	170	42 138	3∃6 2 51	308 85	250 312	100 256	
Olive cks, &c. Palm tons	145	207	1,005 40	1,355	465 41	599 13	
†Quinine lbs Rhubarb cbts	33	5,892 79	211,392 500	215,145 422	2,931	17,331 203	
Sarsaparilla bls Senna bls, &c.	97	83 361	130 1,638	200 2,160	350 203	303 1,258	
Sbellac chts Wax, bees pkgs	5,402 356	5,564	21,227 1,164	29,605 1,305	14,853 832	16,696 1,099	
" Japanes, &c.	59	15	399	245	305	156	

^{*} Stocks lying at Smitb's Wbarf and Brewer's Quay are not included in

[†] Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Docks.

South African Rews.

(From our own Correspondents.)

Note.—The Chemist and Dauggist is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, wiz.:—

SOUTH AFRICAN PHARMACEUTICAL ASSOCIATION. PHARMACEUTICAL SOCIETY OF CLAPE COLONY, NATAL PHARMACEUTICAL SOCIETY. TRANSVAAL PHARMACEUTICAL SOCIETY. RHODESIA PHARMACEUTICAL SOCIETY.

INFECTIOUS DISEASES.—When the last mail left the Cape plague cases were still being found at Port Elizabeth, and East London and King William's Town were by no means free from the disease. In Natal it was abating somewhat, only seven cases being under treatment at Durban and two at Maritzburg. At Uitenhage, Cape Colony, smallpox was discovered on March 12 at one of the native locations on the outskirts of the town, and the local medical officer of health is reported to have said that upwards of fifty cases will come to light. At Jansenville, Cape, sixty-seven cases of smallpox have come under notice during the past three months, and of these fifteen still remain in the hospital. At Kimberley no further cases are reported.

THE PLAGUE AND PREVENTION.—The question as to whether plague will eventually reach Johannesburg is one much debated in certain circles there. It is generally thought that as the city is so high above sea-level should an isolated case turn up—and this is by no means improbable, seeing that passengers are entering and leaving in large numbers every day—it will be brought up in the form of a suffering passenger. Seeing that these views are held it is strange that some system of medical examination has not been put into operation at the various frontier stations. One would think that the importation of undesirables would form a secondary consideration as compared with the possible importation of the plague, and yet the authorities continue to pay considerable attention to the permit system, while a disease likely to play havoc amongst native mine-workers has not as yet formed, apparently, the subject of any serious preventive measures.

THE CUSTOMS CONFERENCE just concluded at Bloemfontein between the various States comprising South Africa, writes our Cape correspondent, although the report has not yet been issued to the Press, does not, if local rumour goes for anything, appear to have been of a very satisfactory nature so far as the federation of the former Union with the Transvaal is concerned. The present Union tariff is a master-piece of literature in many ways, perhaps in its bearings on the drug and allied trades most of all. That the Transvaal will be no party to such measures as we find in the Union tariff is a conclusion arrived at in Transvaal drug-circles when the Conference was first mooted, and unless the Cape Colony and Natal are both prepared to mend their ways in several directions the whole idea is doomed to failure. It would be a difficult matter to persuade the Transvaal trade to pay, for example, 20 per cent. on pills in bulk, the same as for patent or proprietary articles, and to let Cape brandy in free. The Union tariff, where articles for the drug-trade are concerned, is not even understood by the collectors at the various ports themselves. Lines too numerous to mention are levied on at anything from free to 20 per cent., according to the particular port. If, as it is at present understood, the Conference has been a failure, the time may be opportune for Natal to dissolve with the Cape, since the former Colony never apparently appreciated the arrangement from the first, and join hands with the Transvaal. Little would she lose by adopting this course, and in a few years' time she would have much to gain. The method of collecting 3 per cent. transit-dues on goods passing through the ports for Transvaal buyers by the respective Governments is one that calls for severe comment, and the Transvaal delegates are reported to have acted in a very decided manner in this connection. What actually happened at Bloemfontein remains to be seen. That nothing very great was done is generally accepted as a fact both in Cape Town and Johannesburg.

Transvaal Notes.

SUSPENSION OF THE SUGAR-DUTY.—By a special proclamation in the Government Gazette the suspension of the special and ad valorem duties on sugar, the produce of British South Africa, imported into the Transvaal Colony has been ordered, the order to take effect on March 15.

Wanted.—A reward of 3l. is offered by the Director of Prisons, Pretoria, for the arrest of Joseph Michael Quirke, a warder in the Transvaal Prisons Service, who has deserted from the Pretoria Prison. He is described as of Irish nationality; age, 32 years; trade, chemists' assistant; with blue eyes, brown hair, and fresh complexion.

RAND ITEMS.—The Rand Central Drug Company's business, of which Mr. H. Glover was manager, situated at the corner of De Villiers and Harrison Streets, Johannesburg, has been taken over by Messrs. Brande & Co., of Commissioner Street, Johannesburg, and re-opened under the style of "The Globe Pharmacy."—Messrs. P. J. Petersen & Co. expect to re-open their retail establishment in the Market Square, Johannesburg, before the end of March.

To Importers.—Importers of goods into the Transvaal are required, by a recent notice from the Director of Customs, to make due entry of goods immediately upon their arrival, and should they fail to do so within two days the goods may be removed to the King's warehouse. This, if carried into effect, will undoubtedly relieve to some extent the congested state of the railways' goods department, about which there has been considerable complaint in Johannesburg and Pretoria.

TRANSVAAL IMPORTS DURING JANUARY.—The Government Gazette of March 13 contains a statement of the quantity and value of goods imported into the Transvaal during January, 1903, as compared with January, 1902. Amongst the items are the following:—

	190	2	1903		
	Quantity	Value	Quantity	Value	
Acetic acid and vine- gar gals. Apothecaries' wares— Chemicals and toilet articles	1,490	£ 286	2,856	£ 591	
Potassium cyanide lbs. Quicksilver Sulphuric acid lbs. Acids, other kinds Glass bottles doz. Honey lbs. Milk, preserved ,, Mineral waters doz. Oils	475,254 	26,701 1,137 109 185 1,612 139 7,755 99	659,669 13,234 88,107 6,871 2,074,223 9,222	32,493 259 167 132 6,362 209 39,596 1,682	
Castor gals. Cocoanut ,, Linseed ,, Sweet ,, Photographic materials Sheep-dip gals.	1,039 159 3,511 1,488 — 289	257 56 540 532 1,194 43	1,495 868 10,214 6,255 — 3,953	464 209 1,292 1,571 3,353 356	
Soap— Household lbs. Perfumed and toilet ,, Perfumed spirits gals. Turpentine ,, Varnish ,,	271,294 15,492 686 1,345 55	3,333 1,423 1,740 171 31	1,151,814 29,196 652 3,158 6,035	11,790 2,454 1,848 545 867	

TRANSVAAL REGISTRATIONS.—Licences to practise in the Transvaal as medical practitioners have been issued to Andrew Copland, M.B. (formerly of Johnstone, N.B.), William Evans, M.R.C.S. (late of Hoylake, Cheshire), David John Kelly, M.B. (formerly of Inverness, N.B.), George Perkins, L.R.C.P., M.R.C.S. (late of London, Eng.), Norman Sheridan, M.D. (formerly of London, Eng.), John Colman Woods, L.R.C.P., L.R.C.S. (late of Pietermaritzburg). William Barnabas Woodhouse, M.R.C.S., L.D.S., has been licensed as a dentist, and James Mitchell and Herbert Mills Potter (both with the British qualification) are licensed as chemists and druggists.

Obiter Dicta

Re Sale of Food and Drugs Acts.

THE following remarks were made by the Judges in the Cases of Hudson v. Bridge, and Boots Cash Chemists (Limited) v. Cowling. They are well worth recording, and, indeed, remembering.

THE PHARMACOPŒIA AS A STANDARD.

Mr. Justice Wills: I suppose the British Pharmacopæia is prima facie evidence, at all events.

The Lord Chief Justice: Is the British Pharmacopæia published under some Act of Parliament, or did they think that was to be the standard?

Mr. Justice Channell: Is "standard" quite the right expression? What it means is that this is the thing which the purchaser demands when he goes and asks for an article which is made in accordance with the British Pharmacopæia.

The Lord Chief Justice: What the man asks for is that which is to be taken as conforming to the diction, and if you find it in the British Pharmacopæia, that is to be taken as prima facie what he asks for.

Mr. Compton Smith said, as to standard, Dickens v. Randerson decided that ratio is sufficient.

The Lord Chief Justice: That is not disputed, but then it must be ratio for certain purposes, and what is said here is that for the purpose of the composition of the article as sold no ratio is given in the British Pharmacopeia.

The Lord Chief Justice: If the British Pharmacopæia says the The Lord Uniter Justice: If the British Pharmacopæia says the [vinegar of] squills of commerce ought to have 42 [per cent.] of acetic acid, you are right [i.e., entitled to have it with that], hut if the British Pharmacopæia only says, Make your [vinegar of] squills in this way, and then when made it will have 4.2, what is there to show that the [vinegar of] squills of commerce must always be 4.2 if decomposition from keeping reduces the percentage of acetic acid? of acetic acid?

Mr. Compton Smith: Am I not entitled to have my squills fresh?

The Lord Chief Justice: Where does it say that? If the acetic acid is material to cure your throat, yes.

Mr. Asquith: Having regard to the case Dickens v. Randerson, it is a very serious matter, hecause whenever a person goes to buy at a chemist's shop like this a thing which happens to have a formula containing ingredients which compose it in the Pharma-copecia, but which commercially has a different standard, if for the purposes of a criminal prosecution under this Act, the Magistrate is hound to look at the Pharmacopæia, and the Pharmacopæia alone, of course the transaction would be very much hampered.

The Lord Chief Justice: I do not think anything has ever gone so far as that. I think in all probability the cases have gone so far that when you order a thing which is well known and recognised as an article in the Pharmacopæia that that is sufficient to show that is what is being asked for.

The Lord Chief Justice: If you were prepared to show that the name in the market was understood as meaning several different things, there is no authority which shows you must mean the British Pharmacopeia. . . . I do not think there is anything in Dickens v. Randerson which goes as far as this. What we have always understood to be the case is where a person went and ordered something which was known in the British Pharmacopoeia, it was held that the person must be taken to have ordered what was in the British Pharmacopœia, but it does not go on to say that it must always he taken. In that case it was the standard of what was true. It does not give the British Pharmacopœia the force of an Act of Parliament, although it makes it a very important element in the matter of ordinary drugs.

Mr. Justice Channell: It may be the shopkeeper ought to ask which the customer wants before he tenders the methylated soapliniment.

Mr. Justice Wills: There is a large class of substances which are sold in commerce by the same name as they bear in the Pharmacopæia, but which in commerce are perfectly different. If you go and ask for sulphuric acid or nitric acid, and buy it com-mercially, you do not expect to get the pure nitric acid. If you want pure nitric acid, you ask for it as pure.

LIABLE TO DECOMPOSITION.

The Lord Chief Justice: That must be liable to decomposition with reference to the things looked for.

The Lord Chief Justice: The analyst has got to say whether or not it will interfere with the analysis, and not the Court.

Mr. Justice Wills: The clause seems to me to have assumed that decomposition may be of two classes: one which will interfere with the analysis, and one which will not—and that the analyst is to say which has taken place in this case.

Mr. Justice Channell: The Magistrate seems to me to have held that "interfere with the analysis" means interfere or create difficulty about his making a correct analysis; but does not it mean "interfere with the analysis" in the sense that an analysis showing what the constitution of the thing is at the time when hemakes the analysis is not an analysis which would guide you as to what the condition was at the time before?

The Lord Chief Justice: Or what it would have been if

analysed before, if I may use that expression.

The Lord Chief Justice: If I go and ask for acidum aceticum dilutum, and do not get these proportions, it would be a very doubtful question whether the chemist could set up decomposition after having made it.

Mr. Justice Wills: According to you [Compton Smitb], no country chemist could keep a stock of squills. He must make them every time they are asked for, and that would take a good

Mr. Justice Channell: It seems to me, with regard to this matter, that the Magistrate has not got any specific finding upon what is of the whole essence of this particular point. If this [acetic acid] is really an essential element in the article, it is most important to have the proper quantity. If, on the other hand, it is only a thing which is necessarily there hecause they cannot make it differently, but the less of it you really have the hetter, why, the case is very different.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

THE Council met at the Society's house, 67 Lower Mount Street, Dublin, on April 1. There were present the President (Mr. George D. Beggs), the Vice-President (Mr. Johnstone Montgomery) and Messrs. James Tate, W. Vincent Johnston, John Smith, W. F. Wells, P. Kelly, and G. Brown.

LETTERS OF THANKS

from the University, Birmingham, and the Smithsonian Institution, Washington, U.S., for copies of the Society's calendar were received.

THE PRACTICAL CHEMISTRY REQUIREMENT.

In connection with the case of an applicant who had done only part of the 100 hours of practical chemistry, forming part of the qualification for the licence, and who sought to complete that course, an informal discussion took place as to whether the present regulation on the subject was sufficiently specific in its terms to ensure an attendance at the whole of the course, and to exclude the case of a student attending the same parts of the course at different times. The exist-ing regulation requires a certificate of having "attended a course of practical chemistry of not less than three months' duration in the laboratory of one of the institutions recognised by the Society." One of the members suggested that the regulation was susceptible of amendment.

OTHER MATTERS

Reports from the five committees were dealt with, including one from the House Committee submitting estimates for the repair of damages which had been done to the house by

the recent storm and by a fire.

On the motion of Mr. Wells, seconded by the Vice-President, the names of six pharmaceutical chemists, seven chemists and druggists, and twenty-two registered druggists. from whom no replies had been received to registered letters making inquiry as to change of residence, were struck off the rolls of membership.

The Assistants' Page of Rews.

THIS WEEK'S "C. & D." IN BRIEF.

THE LATEST STORE PRICES are given on p. 571.

THE INVENTOR of gelatin suppositories is dead (p. 577).

FURTHER DRUG-CONTRACTS are mentioned on p. 574 and p. 576.

Some curious reflections on homocopatby are contained on p. 537.

THE DEATH OF Mr. JURITZ, a veteran chemist of Cape Town, is reported (p. 536).

Transvall Imports are improving greatly, as the most recent statistics show (p. 605).

THE HOUSE OF COMMONS STAKES (Lough up) is the subject of this weeks cartoon (p. 586).

THE ether solubility of citric and tartaric acids has been determined by Mr. Joseph Tait (p. 58.).

MR. ALDERMAN Cox, of Brighton, one of the oldest pharm wists in England, died on Monday (p. 596).

A DISPENSING ERROR in Manchester has nearly caused the death of Mr. Wilson Barrett (p 574).

A Good Letter to write to M.P.s in regard to the Pharmacy Bill and the Poisons Committee's report will be found on p. 585.

THE CUSTOMS CONFERENCE in South Africa induces our Care correspondent to make some observations and reflections (p. 605).

We select from the recent appeal-cases under the Sale of Food and Drugs Acts some *Obiter Dicta* that should be remembered (p. 606).

THE production of iodine from nitrate liquors was described by Dr. W. Newton to the Scciety of Chemical Industry this week (p. 579).

Mr. J. Reid shows how the protection of the prices of infants' foods have affected the sale of those which are not protected (p. 598).

MESSES. R. A. SINCA (906 marks), H. C. S. Booth (826 marks), and H. M. Corke (779 marks) have gained Naval Hospital dispenserships (p. 574).

MR. GEO. PETER POND, the Flest Street Chemist, had to pay eleven fines at the Mansion House this week in respect to unstamped medicines (p. 593).

RADIUM still attracts attention in regard to the heat and light it gives out. Sir Oliver Lodge gives an understandable explanation about the matter (p. 590).

EXETER CHEMISTS AND GROCERS have discussed together the sale of proprietary medicines, resolving to get non protected articles on the P.A.T.A. list (p. 581).

THE PHARMACY BILL AND THE POISONS COMMITTEE'S REPORT have been discussed by several provincial Associations. See the Winter Session section (pp. 581 et seq.).

THE BUBBLES OF CARBONIC-ACID GAS which adhere to the insides of syphons and in glasses stick there because the surface is not absolutely clean, so Lord Rayleigh says (p. 579).

THERE are millions invested in drug companies. "Yes," says "Xrayser," but how many more millions by individual chemists whose rights the unqualified companies usurp?" (p. 587).

MYSORE SANDALWOOD TREES are threatened with an epidemic of disease, which is receiving the attention of Government officials. Incidentally, observations have been made on the yield of essential oil (p. 588).

OUR AUSTRALASIAN PAGE deals with the following subjects, amongst others: Inter-State reciprocity, Registration of Firms Act (N.S.W.), Customs' decisions, poison-bottles, and apprentice-indentures (p. 578).

This is a holiday-week, and business is thereby curtailed. The only change of note is a slight reduction in "official" quinine, and the market in second hands is flut and easier. Tartaric acid is firmer, and buchu has been in good demand (p. 602).

"WHEN THE TIME COMES" the Pharmaceutical Council are to produce more evidence about poisons So Mr. W. G. Cross says (p. 581). At the Liverpool Chemists' Association meeting the Council was strongly condemned for missing the matter when the time came two years ago (p. 582).

MAINLY PERSONAL.

Mr. S. C. F. Michell (Minor, '91) has succeeded to his late father's business at St. Austell.

Mr. A E. Batchelor, chemist, has been re-elected to the Fareham Uıban District Council.

Mr. W. H. Jones, chemist and druggist, has opened a business in Oxford Street, Mountain Ash, Glam.

Mr. A. Roe, chemist and druggist, is starting in business on his own account at 31 Old Compton Street, W.

New drug stores have been opened at Penrhiwce ber and Aberfan, Glam, by Messrs. Roberts, Osborne & Co.

A New Shop has been opened at 420 Prescot Road, Liverpool, by Mr. H. Lloyd Jones, chemist and druggist

Mr. E. Denis Owen, chemist and druggi-t. has opened a new pharmacy at 135 Victoria Road, Middlesborough.

MR W. R. FOWLER, of Southsea, a retired chemist, has been elected to the Portsmouth Board of Guardians.

Mr. T. M. CHESTERFIELD, chem'st and druggist, has started business on his own account at New Brompton.

Mr C. J. R. Pretty (Minor, '95) has left the Army and Navy Stores and started for himself at Wimbledon Park.

An Assistant in the East-end gave a man caustic for face-ache and toothache. The man has got 5l. damages from the employer.

A Copy of the agreement which assistants to Boots (Lim.) have to sign is given in the C. & D. Correspondence columns this week.

Mr. J. E. Mallinson, chemist and druggist, is opening a nicely fitted shop, called the "Central Pharmacy," opposite the Central Station, Folkestone.

Mr. J. W. Eurchnall, chemist and dauggist, has sequired the business at 6) Queen Street, Ramsgate, carried on for the past twelve years by Mr. James Argue.

Mr. William B. Ramsden, B.Sc., son of Mr. William Ramsden, chemist and drug; st, Fallowfield, Lanca, has obtained the medical degree at Victoria University.

EVEN the malaria-bearing mosquito is too dainty a bird to breed in such waters." This we extract from "Sanitation Personal and Public"—a book for county, district, and parish councillors—by J. P. Sandilands, M.A., T.C.D. Italics ours.

This Little Story is told by Progressive Advertising. An inspector of schools in one district is a Dr. Williams, and when he visited a school near Pulsey a little girl of six greeted him with a smile of recognition whenever he turned in her direction. Struck by this fact he at last asked, "Do you know me, my girl?" "No, sir," was the reply, "but my father does; he always takes your pink pills!"

The schools which advertise in this issue are:—
Leeds, Clarendon Road, Leeds.
London College, 323 Clapham Road, S.W.
South London, 325 Kennington Road, S.E.
Manchester, 225a and 227a Oxford Street, Manchester.
Metropolitan College, 160 and 162 Kennington Park Road, S.E.
Northern, 100 and 102 Burlington Street, Manchester.

COLLEGE NOTE.

WEST OF SCOTLAND COLLEGE OF PHARMACY.—On March 27 the students of this College, accompanied by their Principal (Mr T. S. Barrie), paid a visit to the laboratories of the Glasgow Apothecaries' Company at St. Rollox, and were conducted over the establishment by Mr. Bowie. The preparation of liquid extract of cascara, concentrated infusion of gentian and of calumba, distillation of aromatic spirit of ammonia, and the drying of such substances as alum, Socotrine aloes, the recrystallisation of lead acetate, &c., were seen in operation. The methods of powdering such things as linseed and cayenne, and the conditions necessary to avoid caking, were shown and explained. A practical demonstration of the manufacture of pills was given, after which a survey of the stocks of crude drugs brought a most interesting and instructive visit to a close.

MISCELLANEOUS.

MEDICAL MAN, M.D., L S.A., would accept Directorship of a Limited Liability Drug Co., to meet the requirements of proposed New Pharmacy Act. 145,29, Office of this Paper.

WATERGLASS is the most perfect Egg Preservative known; sample tin, with full directions, 8d.; enough to preserve 1,500 eggs, 5s.; both carriage paid. Special terms to Ohemists from the Excavator Oo., Ltd., 56 Narrow Street, Limehouse, London, E.

SULPHUR TABLETS AND SULPHUR AND SARSAPA-RILLA TABLETS, in 7-lb. hinged and labelled boxes; 2 cwt., 36s. per cwt.; 1 cwt., 38s.; ½ cwt., £1; 28 lbs. for 10s. 6d., all carriage paid; cash with order; samples sent on application to Brice, Obemist, Leicester.

SEND your developing to me, I develop all celluloid films, 1/- roll, 12 expos, any size, postage 1d. return post; cash must accompany order; cameras bought or exchanged; always a large stock of second-hand ones cheap; Brownies, 2/6; Pocket Kodaks. 5/-. Martin, Chemist, South-

VATS, Wood or Iron Tanks, Coppers, Pumps, &c.—David Roberts & I Son have constantly a large stock suitable for Wholesale or Manufacturing Chemists and Druggists; special cheap line now offering; 40 380-gallon vats 25s. each, 90 250-gallon 20s. each, equal to new; also 40 720-gallon, heavy oak, 60s. each. Write, or call and inspect, David Roberts & Son, The Cooperage, Tottenham (close to White Hart Lane station)

HOLLOWAY'S COCA AND MEAT AND MALT WINES both sizes—any quantity, clean or dirty, but must have been stocked before June, 1900. Coldwell & Co., Chemists, Southend-on-Sea.

per 10,000 Handbills (demy 8vo).—We have a Special Scheme by which we are able to write you an attractive and original Handbill, and supply you with 10,000 copies, printed on good paper, carriage paid, for 5t. cash with order; specimens free. A custom-r writes:—"Your bills are extraordinary value." B. Whitworth Hird (Limited), Advertising Specialists, Norwich. Send to-day.

SHOP FITTINGS AND SHOW CAS'S.—Marble-top sponge-case, mahogany and plate-glass, 2 ft. 6 in. long by 3 ft. high by 1 ft. 6 in wide, 90/-; mahogany and plate-glass perfume care and desk, plate-glass mirror back, 55/-; mahogany and plate-glass counter-case, 3 ft. long by 1 ft. 6 in. wide, plate glass mirror fall, and lined velvet, 40/-; 12-ft. complete drug fitting, 9 ft. high, witb bevelled-edged glass drawer labels, shelves, lockers, &c., £12 10/-; and large quantity of other fittings equally chean. equally cheap.

PHILIP JOSEPHS & SONS, 93 Old Street, London, E.C.

K CADAM & TUCKNISS, Sharebrokers, Blackheath, London, S.E.
Telephones 81 and 81 A Lee Green.

ON SALE (free cf commission, subject).—54 Camwal ordinary 13s, 6d., 52 preference 17s, 9d.; 100 Vi-Cocoa preference 16s, 6d.; 100 Idris "A" ordinary 22s.; 160 Ilford ordinary 32s, 9d., 100 preference 23s, 3d.; 100 Jameson ordinary 17s.; 120 G. B. Kent preference 21s.; 50 Lever Bros. preference £11 7s, 6d.; 100 Lewis & Burrows ordinary 10s, 9d.; 100 Mellin's Colonial preference 19s.; 100 A. J. White ordinary 10s, 150 preference 15s, 3d. xd.; 10 Evans Lescher preference £5 8s, 9d. xd.

WANTED (subject).—50 Baiss Bros. preference 19s.; 100 Camwal ordinary 12s, 6d.; 100 preference 16s. 6d.; 100 Barclav preference 7s., 100 ordinary 12s, 6d.; 100 Idris "A" ordinary 25s, 6d.; 100 Ilford ordinary 30s, 9d., 100 preference 22s.

List of Shares for sale and wanted sent free on application. Benkey's

List of Shares for sale and wanted sent free on application. Banker's references given.

Exchange Column—Bargains.

FOR DISPOSAL.

APPARATUS.

Ryland's aërated-water plant complete, gas-engine, and every requisite for manufacturing; must be so'd; owner leaving premises. T.F. HARRIES, 50 Great Barr Street, Birmingham.

Compact soda-water machine, first-class condition, by Barnett & Foster; syphon-filler, tools, gas-pressure gauge, silver-plated syringe; a complete plant for soda and any fancy drink in syrhons. "D. G." (143/15), Office of this Paper.

BOOKS AND PERIODICALS.

Green, vol. ii. (10s.), 6s.; Lowson (6s. 6d.), 3s. 6d.; Jago, advanced (4s. 6d.), 2s. 6d.; Jago, elementary (2s. 6d.), 1s. 3d.; all as new and latest editions; whole or part; postage paid; Attfield, '93 (15s.), 5s. BROWN, 101 Lightwood's Road, Smethwick, Birmingham.

DRUGS AND CHEMICALS.

Overstocked .- Four tins, 22 lts. each, Welsh honey; 7d. lb., carriage paid. WILLIAMS, Chemist, Holyhead.

OPTICAL AND PHOTOGRAPHIC.

Gilt eye-glass sign, 40 in., glazed with blue lenses, stout fancy iron bracket; very effective; cost new, complete, £3; offered 25s., f.o.r. WALLBRIDGE, Optician, St. Helens.

SHOP FITTINGS.

What offers? Specie-jar, nearly new, in good condition, similar Maw's fig. 1. Cox, Chemist, Kettering.

Oddments.—Lot of shop-rounds, 6 carboys, 20 ung. jars, &c.; suit beginner or branch. Letters only, "ODDMENTS," 80 Gayville Road,

Showcase (dentist's), about 26 in. by 16 in. by 4½ in., hent plate-glass front, plate-glass mirror and shelves, splendid condition, 30s.; also 2 small ones, cheap. MACDONALDS, 29 Piccacilly, Manchester.

SHARES.

Shares for sale .- See Miscellaneous column (ahove).

PROPRIETARY ARTICLES.

Dobson's Black-leg drinks; 1 doz. 5s. 6d., 3 doz. 3s., $\frac{1}{2}$ doz. 1s. 6d.; what offers, carriage forward? HUTCHEON, Bonnyrigg, Midlothian.

Half-price .- 2 each, Yanitas, Condy's ozonised water, Pumiline ext., Pinol, Henry's magnesia, Moreton's Animal's Friend; 1 each, Rubini's styptic, Moxon's aperient. Torrens, Youghal.

MISCELLANEOUS.

Soda fountain by Best; cost £31 10s., complete; can be seen working; best offer taken either in goods or cash. DURBIN, 131 High Street,

No. 5 Remington typewriter; Elite type; perfect condition; lowest price, £8 10s.; can be seen at work. Fletcher, Fletcher & Co. (LIM.), Holloway, N.

Printing press (hand-power) for labels, circulars, &c.; will print forme 9 in. × 6 in.; equal to new; lowest price, £7 10s.; can be seen working. FLETCHER, FLETCHER & Co. (LIM), Holloway, N.

WANTED.

Wooden counter show stands, about 3 ft. Cull, Chemist, Hounslow.

Sugar-coating pan for pills and tablets. Apply, 257/26, Office of this Paper.

Old electric lamps and scrap platinum. P. Rowsell, 9 Derwent Grove, E. Dulwich.

Old artificial teeth; cash by return. Messrs. DENT, 120 Greyhound Lane, Streatham. Optical trial-case; good condition. Full particulars, "ASTIG.," 166

Boston Street, Manchester. Autograph prescriptions for teaching purposes; also Wills's text books.

WYATT, Chemist, Lancaster. Dental-chair; must be low and in fair condition. State lowest price,

SHARP, 41 High Street, West Norwood.

30 gal. vacuum-pan, complete, with condenser and pump; state amount of water it is carable of evaporating and condensing per hour; also state maker and description (f pan and condenser. "AJAX" (150/2), state maker and description of pan and condenser. Office of this Paper.